



LEICESTERSHIRE COUNTY COUNCIL

# ANNUAL REPORT

*of the*

MEDICAL OFFICER OF HEALTH  
FOR THE YEAR

1938

J. A. FAIRER, M.D., D.P.H.  
COUNTY MEDICAL OFFICER





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(Based on model circular issued by the Ministry of Health)

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17, FRIAR LANE,  
LEICESTER.

JUNE, 1939.

MR. CHAIRMAN, LADIES AND GENTLEMEN,

It gives me great pleasure to present my Annual Report on the public health services of the county for the year 1938.

In view of the pending re-organisation under the Local Government Act, 1933, it was considered desirable to appoint a temporary assistant school medical officer in place of Dr. Dalton, and Dr. Grace Thompson was appointed as from March 21st, 1938.

The medical services have been extended during the year by the construction of a new laboratory and clinic in St. Martin's, Leicester and the opening of the new health centre at South Wigston. Taken as a whole the statistics for the year show a decided improvement on those for the previous year, particularly in one or two instances.

The death rate of 10.48 is a decrease on the figure for last year (11.89), and compares very favourably with the rate for the country as a whole which is 11.6. The death rate for cancer shows a slight decrease on the figure for last year while the death rate from phthisis has reached the record low figure of 0.38. This is a remarkable improvement on last year's figure of 0.54.

The infant mortality rate for 1938 which is 44 per 1,000 births as compared with 49 for last year, compares favourably with the rate of 53 for the whole country.

The birth rate has again increased slightly, the figure being 15.3 as compared with 14.9 for 1937 and the rate for England and Wales during 1938 which is 15.1. The ratio of male to female births was 104.8 to 100 in 1938 as compared with 103.6 to 100 in 1937.

With regard to the zymotic deaths, the figure for 1938 was 38, a decrease of 10 on that for the previous year, and the lowest figure yet recorded. Unfortunately the number of deaths from diphtheria increased from 14 in 1937 to 19 last year, but there has been a welcome decrease in those from scarlet fever, whooping cough, measles and influenza.

During the year a minor outbreak of acute anterior poliomyelitis

occurred, 20 cases being notified. This outbreak was investigated by Dr. Lisney and a report on the findings is included in a special article by him at the end of this report. Fortunately no deaths occurred from this disease.

The maternity and child welfare services were further augmented during the year by the provision of two additional facilities, *viz.*: the dental treatment of expectant and nursing mothers and the establishment of an emergency unit ("Flying Squad").

Now that the Midwives Act, 1936, has been in force for well over a year I am able to report that no serious difficulties have arisen in connection with the Act and that it has proved a valuable addition to the services.

Our obligations under the Air Raid Precautions Act, 1937, have placed an extra strain on certain members of the public health staff, the duties in this connection having gradually gathered momentum since the work on the casualty services in the county was commenced early in the year. Owing to pressure of other duties I have had to leave the organisation of these services to my Deputy, Dr. Lisney. A short additional section on the casualty services is included in this report; next year it is hoped that schemes in connection with the casualty services will be completed and a more comprehensive report included.

Two special articles are included in this report to which I should like to call attention:—

(a) "Anterior Poliomyelitis" by Dr. A. A. Lisney.

(b) "The Doctor at the Infant Welfare Centre" by  
Dr. A. W. S. Thompson.

To Dr. A. A. Lisney I am indebted for the compilation of this report and I wish to tender my grateful thanks to the whole of the medical, sanitary and clerical staffs for their zealous and enthusiastic support which has ensured the smooth running of all departments.

I should also like to express my thanks for the consideration extended to me by the chairman and members of the committee.

I have the honour to be, Mr. Chairman and Gentlemen,

Your obedient servant,

J. A. FAIRER.

June, 1939.

*County Medical Officer of Health.*

**THE COUNTY PUBLIC HEALTH AND HOUSING COMMITTEE.  
1938.**

J. W. BLACK, Esq. (*Chairman*).

ABBOTT, W.	MAWBY, G. H.
ARMSTRONG, A. E.	PARSONS, C. H.
BRIERS, A. J.	PHILLIPS, Mrs. M. L.
COWMAN, T.	PICKERING, C. H.
CRAWSHAW, The Rt. Hon. LORD	POCHIN, V. R. ( <i>ex-officio</i> )
FORSELL, J. T. ( <i>Vice-Chairman</i> )	PRATT, J.
FULLER, B.	RIPPIN, W. H.
HOLMES, J. H.	TANDY, E. W.
HUBBARD, B.	TAPP, W.
MARTIN, Lt-Col. R.E., C.M.G. ( <i>ex-officio</i> )	TOMPKINS, A. J.
MAIN, G. P.	WILLETT, F.
MARSH, Mrs. A. G.	WILSON, C.
	WRIGHT, W. H.

**MATERNITY AND CHILD WELFARE COMMITTEE.**

This committee consists of all the members of the Public Health and Housing Committee with the addition of the following ladies :—

Mrs. A. SHIRLEY ATKINS.  
Mrs. E. E. BUCKINGHAM.  
Mrs. B. EVERARD.  
Mrs. S. M. JOYCE.  
Mrs. G. SPENCER.  
Mrs. W. R. TUCKETT.

**STAFF.**

County Medical Officer :

School Medical Officer :

Administrative Officer for Tuberculosis, and Maternity and Child Welfare :  
J. A. FAIRER, M.D., D.P.H.

Deputy County Medical Officer :

Deputy School Medical Officer :

A. A. LISNEY, M.A., M.D., L.M., D.P.H.

Assistant County Medical Officer :

Senior Assistant School Medical Officer :

A. W. S. THOMPSON, M.B., M.R.C.P. (*Edin.*), D.P.H.

Chief Tuberculosis Officer :

N. A. COWARD, O.B.E., M.D., D.P.H.

Assistant Tuberculosis Officer :

S. W. LANE, M.B., B.S.

Assistant Infant Welfare Officer :

Assistant School Medical Officer :

MARY E. WESTON, M.B., B.S.

Assistant Infant Welfare Officer :

School Oculist :

CONSTANCE WALTERS, B.Sc., M.B., B.Ch.

Assistant School Medical Officers :

S. E. MURRAY, M.B., B.S.

J. B. DALTON, M.B., Ch.B. (*deceased 23/2/38*)

GRACE THOMPSON, M.B., Ch.B., (*appointed temporarily 21/3/38*).

Medical Superintendent, Markfield Sanatorium :

H. SELBY, M.B., B.S.

Assistant Resident Medical Officers, Markfield Sanatorium :

J. EGAN, M.B., B.Ch.

J. C. AITKEN, M.B., Ch.B. (*resigned 14/5/38*).

R. M. McGOWAN, M.B., Ch.B. (*appointed 1/5/38*).

Chief Dental Surgeon :

P. ASHTON, L.D.S.

STAFF—*continued*.

## Assistant Dental Surgeons :

A. E. WARD, L.D.S.

C. L. R. McCLELLAN, L.D.S.

D. R. A. WILCOX, L.D.S.

L. D. SMITH, L.D.S.

W. E. LYNE, L.D.S. (*appointed 11/5/38*).

(There are six dental attendants).

## County Sanitary Inspector :

W. W. BAUM, F.R. San.I., F.S.I.A.

## Assistant County Sanitary Inspector :

E. F. RODWELL, Cert.S.I.B., M.S.I.A.

The offices of the Health Department are divided into five main sections :—

## General, and Maternity and Child Welfare :

Chief Clerk (H. Burditt) and seven assistants.

## Tuberculosis :

Chief Clerk and Steward, Markfield Sanatorium (H. Collington) and three assistants.

## Isolation Hospital :

Chief Clerk (J. Baylis) and one assistant.

## School Medical Service :

Chief Clerk (W. A. Thornton) and three assistants.

## Laboratory :

Chief Assistant (J. N. Graham) and two assistants.

STAFF—*continued.***Health Visitors.**

‡\*Mrs. A. WARREN, S.R.N. (*Superintendent*).

†Miss A. Addy, S.R.N.	†Miss E. Y. Feakin, S.R.N.
Mrs. A. D. Antrobus, S.R.N.	Miss L. Fox, S.R.N.
†Miss C. E. Bangham, S.R.N.	Miss T. M. Griffiths, S.R.N.
Mrs. S. J. Bourne, S.R.N.	†Miss M. L. Hill, S.R.N.
Mrs. P. Brunsdon, S.R.N.	( <i>appointed 11/11/38</i> ).
†*Miss G. E. Butler, S.R.N.	*Miss K. A. Marsh, S.R.N.
( <i>Deputy Superintendent</i> )	‡†Miss W. C. Porter, S.R.N.
*Mrs. F. E. M. Cade	†Miss C. M. Ryder, S.R.N.
‡†Miss G. I. Carryer, S.R.N.	Miss E. H. Seabrook
‡Miss M. A. Dilworth, S.R.N.	Miss W. A. Simmons, S.R.N.
†Miss G. E. Earl, S.R.N.	Mrs. E. E. Wright, S.R.N.

Those marked \* hold the Certificate of Sanitary Inspector.

Those marked ‡ are Inspectors of Midwives.

Those marked † hold the Health Visitors' Certificate of the Ministry of Health.

All the above are fully trained nurses and hold the Certificate of the Central Midwives' Board. The Superintendent also holds the Child Welfare Workers' Certificate.

**Child Life Protection.**

Mrs. F. T. Pilkington acts as Child Life Protection Visitor for the Barrow-on-Soar Rural District.

**County Council Whole-Time Midwives.**

Bateman, Miss K.	Manton, Miss B. M.
Concannon, Mrs. A.	Robinson, Miss E.
*Chapman, Mrs. G. H.	Steans, Miss D. G.
( <i>resigned 31/10/38</i> ).	Turner, Mrs. O. A.
Kinson, Miss A. S.	Yates, Mrs. A.
McClelland, Miss E. M.	

All the above hold the certificate of the Central Midwives' Board.

\*Successor appointed 2/1/39. District served during interval by Midwives from the Leicestershire County Nursing Association.



**ADDITIONAL OFFICERS.****(1) District Medical Officers of Health.****URBAN.**

DISTRICT.		NAME AND ADDRESS.	
Ashby-de-la-Zouch	....	Dr. T. Forsyth	Hugglescote.
Ashby Woulds	....	Dr. T. Forsyth	Hugglescote.
Coalville	....	Dr. A. Hamilton	Coalville.
Hinckley	....	Dr. J. H. Donnell	Hinckley.
Loughborough	....	Dr. R. C. Holderness	Loughborough.
Market Harborough		Dr. C. T. Scott	Market Harborough.
Melton Mowbray	....	Dr. J. E. O'Connor	Kirby Muxloe.
Oadby	....	Dr. J. E. O'Connor	Kirby Muxloe.
Shepshed	....	Dr. A. Segerdal	Coalville.
Wigston	....	Dr. J. E. O'Connor	Kirby Muxloe.

**RURAL.**

DISTRICT.		NAME AND ADDRESS.	
Ashby-de-la-Zouch	....	Dr. T. Forsyth	Hugglescote.
Barrow-on-Soar	....	Dr. J. E. O'Connor	Kirby Muxloe.
Billesdon	....	Dr. J. E. O'Connor	Kirby Muxloe.
Blaby	....	Dr. J. E. O'Connor	Kirby Muxloe.
Castle Donington	....	Dr. T. M. Montford	Castle Donington.
Lutterworth	....	Dr. J. E. O'Connor	Kirby Muxloe.
Market Harborough		Dr. J. S. Macbeth	Kibworth Beauchamp.
Market Bosworth	....	Dr. T. G. Kelly	Desford.
Melton & Belvoir	....	Dr. J. E. O'Connor	Kirby Muxloe.

**(2) District Medical Officers (Poor Law) and Public Vaccinators.**

Bottesford	....	Dr. R. J. C. Hamilton, Bottesford.
Croxtan Kerrial	....	Dr. R. H. Hudson, Woolsthorpe, Grantham.
Waltham	....	Dr. M. W. Atkinson, Waltham-on-the-Wolds.
Long Clawson	....	Dr. G. C. B. Atkinson, Long Clawson, ( <i>deceased 13/2/38</i> ).
		Dr. S. T. Cuddigan, Long Clawson ( <i>appointed 19/3/38</i> ).
Wymondham	....	Dr. H. S. Furness, Melton Mowbray.
Asfordby	....	Dr. G. S. A. Bishop, Melton Mowbray.
Melton Mowbray	....	Dr. G. S. A. Bishop, Melton Mowbray.
Somerby	....	Dr. R. J. Mould, Somerby.
Loughborough	....	Dr. C. L. Lapper, Loughborough.

DISTRICT.			NAME AND ADDRESS.
Shepshed	....	....	Dr. R. M. Paterson, Shepshed.
Castle Donington	....	....	Dr. T. M. Montford, Castle Donington.
Mountsorrel	....	....	Dr. J. S. Strachan, Mountsorrel.
Barrow-on-Soar	....	....	Dr. J. S. Gray, Sileby.
Sileby	....	....	Dr. J. S. Gray, Sileby.
Syston	....	....	Dr. A. M. Macintosh, Syston.
Billesdon	....	....	Dr. E. K. Williams, Billesdon.
Hallaton	....	....	Dr. P. Drummond, Hallaton, ( <i>resigned 24/2/38</i> ) Dr. B. H. Moore, Hallaton, ( <i>appointed 25/2/38</i> )
Market Harborough			
No. 1	....	....	Dr. R. G. Keays, Market Harborough.
No. 2	....	....	Dr. J. S. Macbeth, Kibworth Beauchamp.
Wigston	....	....	Dr. S. B. Couper, Blaby.
Enderby	....	....	Dr. W. R. M. Berridge, Enderby.
Lutterworth	....	....	Dr. T. W. Crowley, Lutterworth, ( <i>resigned 6/11/38</i> ). Dr. F. P. Freeman, ( <i>appointed 7/11/38</i> ).
Peatling	....	....	Dr. E. Bromley, Peatling Magna.
Hinckley	....	....	Dr. H. Shirlaw, Hinckley.
Market Bosworth	....	....	Dr. G. D. Kelly, Market Bosworth.
Ibstock	....	....	Dr. C. S. Agnew, Ibstock.
Ashby-de-la-Zouch	....	....	Dr. H. H. Silley, Ashby-de-la-Zouch.
Coalville	....	....	Dr. T. Forsyth, Hugglescote.
Measham	....	....	Dr. J. R. Salmond, Appleby Magna.

### (3) District Sanitary Inspectors.

#### URBAN DISTRICTS :

DISTRICT.			NAME AND ADDRESS.
Ashby-de-la-Zouch	....	....	Marlow, G. E., Council Offices, Ashby-de-la-Zouch.
Ashby Woulds	....	....	Woodhall, P. C., Council Offices, Moira.
Coalville	....	....	Greenwood, B., Council Offices, Coalville.
Hinckley	....	....	Melson, E., Council Offices, Hinckley.
Loughborough	....	....	Bintcliffe, H., Council Offices, Loughborough
Market Harborough	....	....	Elliott, B. G., Council Offices, Market Harborough.
Melton Mowbray	....	....	Buxton, H., Council Offices, Melton Mowbray
Oadby	....	....	Fryer, G. E., Council Offices, Oadby.
Shepshed	....	....	Jones, R. B., Council Offices, Shepshed.
Wigston	....	....	Ashbridge, F. B., Council Offices, Wigston.



## RURAL DISTRICTS.

DISTRICT.		NAME AND ADDRESS.
Ashby-de-la-Zouch	....	Cook, J. P., Rural District Council Offices, Ashby-de-la-Zouch
Barrow-on-Soar	(1)	Dean, G. T., 133 Loughborough Road, Leicester.
	(2)	Curtis, W. C. H., 133 Loughborough Road, Leicester.
Billesdon	....	Shimmin, S., 5 New Street, Leicester.
Blaby	....	Stevens, A. H., Council Offices, Narborough.
Castle Donington	....	Bagguley, H. B., Council Offices, Castle Donington.
Lutterworth	....	Berridge, G., Council Offices, Lutterworth.
Market Bosworth	....	Trowbridge, A. N., Council Offices, Market Bosworth.
Market Harborough	....	Turner, W. R., Kibworth.
Melton Mowbray	....	Hesford, L., Nottingham St., Melton Mowbray.

## 4) Vaccination Officers.

DISTRICT.		NAME AND ADDRESS.
Ashby-de-la-Zouch	....	Baker, W. S., Ashby-de-la-Zouch.
Billesdon	....	Fordham, W. J., Market Harborough.
Enderby	....	Collis, A., Narborough.
Hinckley	....	Pendlebury, W. H., Hinckley.
Loughborough	....	Milner, A. L., Loughborough.
Lutterworth	....	Webb, H., Lutterworth.
Market Harborough		Fordham, W. J., Market Harborough.
Market Bosworth	....	Hunt, E. L., Ibstock.
Measham	....	Leslie, D., Measham.
Melton (North)	....	Cox, E. S., Melton Mowbray.
Melton (South)	....	Lock, H. N., Melton Mowbray.
Mountsorrel	....	Cannell, S. G., Quorn.
Syston	....	Williams, A. E., Syston.
Wigston	....	Farrar, W. W., South Wigston.

# REPORT.

## NATURAL AND SOCIAL CONDITIONS, AND STATISTICS OF THE AREA.

### NATURAL AND SOCIAL CONDITIONS.

Although chiefly agricultural Leicestershire has a number of important industrial and mining centres. Loughborough and Hinckley are the largest industrial towns where trades in connection with hosiery, boots and shoes are carried on ; the chief mining district is centred in the North-western area. Not only do the industries in the county absorb a large number of workers but a daily exodus takes place to the city of Leicester.

During the past few years a number of families from the distressed areas have been housed in village settlements in Leicestershire, the largest being Cosby and Elmesthorpe. Each settlement is supposed to be a paying concern, the settlers growing tomatoes and other produce on the land and in the hot-houses provided.

Employment has not fluctuated to any great extent during the past year and the county is happily free from any gross unemployment.

### STATISTICS OF THE AREA.

Area in acres	....	....	515,408	....	....	Urban	56,860
						Rural	458,540
Population (Census 1931)	....	....	....	....	....		283,910
„ Urban			133,227				
„ Rural			150,690				
„ Estimated resident (June 1938)	....	....	....	....	....		302,600
„ Urban			142,100				
„ Rural			160,500				
Number of inhabited houses (1931)	....	....	....	....	....		71,540
Number of families or separate occupiers (1931)					....		73,430
Reduced rateable value	....	....	....	....	....		£1,436,850
Sum represented by a penny rate	....	....	....	....	....		£5,450

### EXTRACT FROM THE VITAL STATISTICS OF THE YEAR.

			Total.	Males.	Females
Live births	{ Legitimate	....	4,507	2,314	2,193
	{ Illegitimate	....	126	57	69
	{ Total Births	....	4,633	2,371	2,262

Birth rate per 1,000 population : 15.3.

Still births : 174.

Rate per 1,000 total births : 36.2.

Deaths : Total 3,171. Death rate 10.48.

Number of women dying in or in consequence of childbirth :

Sepsis 3. Other causes 12. Total 15.

Rate per 1,000 total births : 3.12.

Deaths of infants under one year of age per 1,000 live births :

Legitimate 43.7. Illegitimate 55.6.

Total rate per 1,000, 44.0.

Deaths from Measles (all ages)	....	....	....	....	5
„ „ Whooping Cough (all ages)	....	....	....	....	3
„ „ Diarrhoea (under two years)	....	....	....	....	8

### *Infant Mortality.*

The infant mortality rate for 1938 is returned as 44, which is an improvement on the figure of 49 recorded last year. The rate for England and Wales for the same period is 53. This rate of 44 is, with the exception of 41 in 1934, the lowest recorded in the county. The average infant mortality rate for the last five years is 47.4. In the five years previous to the War (1910—1914 inclusive) it averaged 92.6.

### **Infant Mortality.**

Year	URBAN		RURAL		WHOLE COUNTY		Rate for England and Wales
	No.	Rate	No.	Rate	No.	Rate	
1934	69	37	125	43	194	41	59
1935	90	53	131	50	221	51	57
1936	107	53	124	52	231	52	59
1937	103	49	117	49	220	49	58
1938	109	49	95	40	204	44	53

### *Deaths.*

The death rate of the county (10.48) shows a decrease compared with that of the preceding year (11.89). The death rate for England and Wales for 1938 is 11.6.

The total number of deaths in the county in 1938 was 3,171 as compared with 3,577 in 1937.

The seven chief causes of death with the corresponding percentages of total deaths were :—

(1) Heart disease	....	....	24.7
(2) Cancer	....	....	14.6
(3) Cerebral hæmorrhage	....	....	6.6
(4) Congenital debility	....	....	4.7
(5) Pneumonia	....	....	4.3
(6) Senility	....	....	4.2
(7) Phthisis	....	....	3.6

The deaths from heart disease show an increase both in the percentage relative to the number of deaths, and in the actual death rate. The number of deaths which occurred from heart disease has increased from 778 in 1937 to 784 in 1938, but is much lower than the number of deaths in 1936, *viz.* 840.

There has been a welcome decrease in the number of deaths from cancer, the number in 1937 was 516, while this year the deaths from cancer have fallen to 463.

There has been a remarkable decrease in the number of deaths from phthisis, the death rate falling from 0.54 to 0.38. The actual decrease in the number of deaths as compared with last year was 47.

The number of deaths from pneumonia shows a decrease, the death rate being 0.45 as compared with 0.49 during 1937, while the deaths from congenital debility show an increase, the death rate being 0.49 as compared with 0.44 for the previous year.

**Table of the Seven Chief Causes of Death.**

The Seven Chief Causes of Death	URBAN		RURAL		WHOLE COUNTY		Percentage of Total Deaths		
	No.	Rate	No.	Rate	No.	Rate	Urban	Rural	Whole C'ty
Heart Disease	373	2.62	411	2.56	784	2.58	24.8	24.7	24.7
Cancer ....	198	1.39	265	1.65	463	1.53	13.1	15.9	14.6
Cerebral Hæmorrhage	109	0.77	99	0.62	208	0.69	7.2	5.9	6.6
Congenital Debility ....	85	0.60	63	0.39	148	0.49	5.6	3.8	4.7
Pneumonia ....	69	0.49	66	0.41	135	0.45	4.6	4.0	4.3
Senility ....	68	0.48	65	0.41	133	0.44	4.5	3.9	4.2
Phthisis ....	59	0.41	56	0.35	115	0.38	3.9	3.4	3.6

The following table shows the net number of registered deaths with corresponding rates (urban and rural) in Leicestershire and England and Wales during the five years 1934-1938 :—

### Deaths.

Year	URBAN		RURAL		WHOLE COUNTY		Rate for England and Wales
	Net No. Regd.	Rate	Net No. Regd.	Rate	Net No. Regd.	Rate	
1934	1253	10.13	1843	9.78	3096	9.92	11.8
1935	1265	10.56	1986	11.01	3251	10.83	11.7
1936	1511	11.26	1847	11.30	3358	11.28	12.1
1937	1652	11.69	1925	12.08	3577	11.89	12.4
1938	1507	10.60	1664	10.37	3171	10.48	11.6

During the whole of this period the death rate of the county has been considerably lower than that of England and Wales.

### Zymotic Deaths.

In 1938 the zymotic deaths numbered 38. This figure is a decrease of upon that for the previous year.

YEAR	URBAN		RURAL		WHOLE COUNTY	
	No.	Rate	No.	Rate	No.	Rate
1934	23	0.19	29	0.14	52	0.17
1935	28	0.23	30	0.17	58	0.19
1936	34	0.25	25	0.15	59	0.20
1937	22	0.16	26	0.16	48	0.16
1938	23	0.16	15	0.09	38	0.13

### Birth Rate.

The birth rate for 1938 is 15.3 as compared with 14.9 in 1937. The total number of live births was 4,633. Of the recorded births 2,371 were males and 2,262 females, the ratio of male to female births being 104.8 to 100.



### Summary of Birth Statistics, Urban, Rural and Whole County.

Estimated Population	URBAN 142,100		RURAL 160,500		WHOLE COUNTY 302,600		ENGLAND AND WALES
	No.	Rate	No.	Rate	No.	Rate	Rate
Live Births	2242	15.8	2391	14.9	4633	15.3	15.1

## GENERAL PROVISION OF HEALTH SERVICES FOR THE AREA.

### LABORATORY FACILITIES.

The County Laboratory was established in January, 1920, and a circular letter was sent to all general practitioners offering them facilities for aids to diagnosis. Practically all bacteriological examinations, with the exception of histological work and Wassermann tests, are carried out, specimens for Wassermann tests being sent to the Leicester Royal Infirmary. The laboratory provides an income, as samples of water and milk received from urban and rural districts are charged for at the rates 10/6d. and 2/6d. per sample respectively. Throat swabs from isolation hospitals are charged at 2/- each and the tuberculosis department pays 2/6d. for each specimen of sputum examined. The total revenue for the year was approximately £685.

### BACTERIOLOGICAL AND CHEMICAL WORK.

The following examinations were carried out during the year:

Bacteriological milk examinations ....	3,268
Swabs for diphtheria....	5,547
Sputa for tubercle bacilli ....	1,093
Sewage and water analyses ....	632
Urine, general and bacteriological ....	302
Urine for tubercle bacilli ....	202
Wassermann tests ....	145
Widal tests for typhoid and undulant fevers ....	65
Films for gonococci ....	32
Hair for ringworm ....	38
Blood counts ....	22
Milk for fat content ....	29
Swabs for hæmolytic streptococci ....	32
Miscellaneous ....	59

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11,466

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The total number of examinations made was 2,678 more than last year and is the highest ever recorded. There was an increase of 2,350 in the number of swabs for diphtheria, and the number of milk samples has steadily increased from 695 in the year 1925 to the present total of 3,268.

### *Milk Examinations.*

The 3,268 samples of milk were received from the following sources :—

"A."	Accredited producers	....	....	....	1,449
"A.R."	Prospective accredited producers	....	....	....	243
"D."	Urban and rural districts	....	....	....	806
"S."	School supplies	....	....	....	540
"P.A.I."	Public assistance institutions	....	....	....	118
"T.T."	Tuberculin tested producers	....	....	....	52
"M."	Miscellaneous	....	....	....	60

With the exception of 167, which were samples of pasteurized milk, all were examined by the methylene blue test and for coliform organisms in 1/100th part of a millilitre (cubic centimetre). The pasteurized samples were examined by the plate count method and for coliform organisms.

The following table shows the results of these examinations :—

Class of milk	Satisfactory on both tests	Not satisfactory on both tests	Not satisfactory on Methylene B. test	Not satisfactory on Coliform test	TOTALS
"A" ....	1101 (76.0%)	152 (10.5%)	115 (7.9%)	81 (5.6%)	1449
"A.R." ....	206 (84.8%)	11 (4.6%)	13 (5.3%)	13 (5.3%)	243
"D" ....	635 (81.3%)	37 (4.7%)	35 (4.5%)	74 (9.5%)	781
"S" ....	344 (86.0%)	12 (3.0%)	24 (6.0%)	20 (5.0%)	400
"P.A.I." ....	92 (78.0%)	8 (6.8%)	8 (6.8%)	10 (8.4%)	118
"T.T." ....	46 (88.5%)	Nil	4 (7.7%)	2 (3.8%)	52
"M" ....	39 (67.2%)	6 (10.4%)	4 (6.9%)	9 (15.5%)	58
TOTALS ....	2463 (79.4%)	226 (7.2%)	203 (6.6%)	209 (6.8%)	3101

This table does not include 167 samples of pasteurized milk.

From the above it would seem that the samples from schools and districts were better than the accredited ones, but it must be mentioned that the first two classes were mostly examined on the day of production,

whereas the accredited ones were examined on the day after, in accordance with the Milk (Special Designations) Order. With the exception of the pasteurized samples there are no regulations governing the school and district supplies, the object of these examinations being to improve the standard of production. Details of these schemes have been given in previous reports.

An analysis of all these samples, excluding those pasteurized, was made to find the effect of temperature on the results, and the analysis showed that 2,511 samples were examined on days when the temperature was below sixty degrees Fahrenheit and 590 when it was above. It was found that when the temperature was below sixty degrees, 82.5 per cent. were satisfactory but when above sixty, 65 per cent. only were satisfactory, a fall of 17.5 per cent.

There has been some opposition to the methylene blue test in some quarters, chiefly because it gives no indication as to whether or not there has been any improvement or deterioration. In consequence, from the 1st January, 1938, non-designated samples were "graded" as follows :—

- Grade I. The sample is of the accredited milk standard *i.e.*, retains the methylene blue coloration for  $4\frac{1}{2}$  hours (1st May to 31st October) or  $5\frac{1}{2}$  hours (1st November to 30th April).
- Grade II. The sample retains the methylene blue coloration for at least 2 hours but less than the time demanded for accredited milk.
- Grade III. The sample retains the methylene blue coloration for more than 30 minutes but less than 2 hours.
- Grade IV. The sample retains the methylene blue coloration for less than 30 minutes.

It is suggested that the presence of the coliform bacillus in one hundredth of a cubic centimetre of milk in more than one tube out of three shall automatically place the sample one grade lower.

The adoption of these grades, which it must be understood are arbitrary and not provided for by any legislation, should assist producers, as it will inform them if the milk produced is deteriorating or improving.

The result of this grading shows the following :—

	Total	Grade I.	Grade II.	Grade III.	Grade IV.
Schools	400	344	43	9	4
		(86.0%)	(10.8%)	(2.2%)	(1.0%)



Districts	781	635 (81.3%)	109 (13.9%)	31 (4.0%)	6 (0.8%)
P.A.I's.	118	92 (77.9%)	17 (14.4%)	8 (6.8%)	1 (0.9%)

(This means that 1,071 or 82.4% were Grade I).

### *Diphtheria.*

The 5,547 swabs for diphtheria, of which 425 were positive, were received from the following sources :—

General practitioners	....	....	....	....	1,856
Isolation hospitals	....	....	....	....	3,254
School medical officers	....	....	....	....	47
Saturday Hospital Society	....	....	....	....	390

The swabs from the Saturday Hospital Society were taken in accordance with an agreement between that body and the County Council. The provisional agreement is that the Society pay the Council the sum of £50 per annum for swabs to be taken of all children before entering their convalescent home, to ensure that no "carriers" are admitted. This arrangement was started in July, 1938 and it is interesting to note that following the initiation of this scheme there have been no cases of diphtheria in the Home although during the previous twelve months 26 cases had occurred.

### *Tuberculosis.*

The 1,093 specimens of sputa examined, 207 of which were positive, were received from the following :—

Tuberculosis medical officers	....	....	....	....	518
General practitioners	....	....	....	....	575

In addition to these specimens of sputa, 202 samples of urine were examined for tubercle bacilli, and 15 of them were positive.

### *Sewage and Water Analysis.*

Twenty-eight samples were taken from the River Soar and tributaries in connection with the Ministry of Agriculture and Fisheries' survey of the Trent Watershed. The remainder were of drinking supplies, sewage effluents, etc.

### *Hair for Ringworm.*

Practically all the specimens were received from the school medical officers and nurses. Twenty-two of them were positive.

*Widal tests for Typhoid Fever and Undulant Fever.*

The number of specimens of blood received in connection with the diagnosis of these diseases was 65. Three of them were positive. There were also 11 specimens of urine and fæces.

*Venereal Diseases.*

Seven of the films for gonococci out of the total of 32 were positive. They were all received from general practitioners.

*General.*

The following table shows the districts in the county from which the various specimens were received :—

URBAN DISTRICTS.				RURAL DISTRICTS.			
Ashby-de-la-Zouch	....	75		Ashby-de-la-Zouch	....	451	
Ashby Woulds	....	34		Barrow-on-Soar	....	1,276	
Coalville	....	581		Billesdon	....	300	
Hinckley	....	710		Blaby	....	820	
Loughboro' Municipal Boro'		523		Castle Donington	....	227	
Market Harborough	....	141		Lutterworth	....	254	
Melton Mowbray	....	370		Market Bosworth	....	684	
Oadby	....	118		Market Harborough	....	259	
Shepshed	....	114		Melton and Belvoir	....	455	
Wigston	....	274					

Specimens were also received from :—

Markfield Sanatorium	....	145
Hinckley Isolation Hospital		584
Blaby Isolation Hospital	....	1,389
Melton Isolation Hospital		1,292
Saturday Hospital Society		390

## AMBULANCE FACILITIES.

Particulars regarding the ambulance facilities available in the county are outlined below :—

*Infectious Disease.*

An ambulance stationed at the Blaby Isolation Hospital conveys cases of infectious disease to the isolation hospitals at Blaby, Hinckley and Markfield, while a second ambulance, maintained at the Melton Mowbray Isolation Hospital serves the area dealt with by that hospital.

*Maternity.*

The transport of emergency maternity cases to hospital is carried out by arrangement with the St. John Ambulance Brigade which controls ambulances stationed at Coalville, Hinckley, Loughborough and Market Harborough.

In all cases the cost of transport is guaranteed by the Maternity and Child Welfare Committee and subsequent application is made to the patient for the recovery of the charges.

*Tuberculosis.*

Cases of tuberculosis are conveyed by an ambulance maintained at the County Sanatorium and Isolation Hospital, Markfield.

The St. John Ambulance Brigade and the Melton Mowbray Town Ambulances are also employed for these cases, the charges being paid by the Tuberculosis Committee who afterwards apply to the patient for the recovery of the charges.

*Public Assistance.*

The Public Assistance Committee give an annual grant to the St. John Ambulance Brigade for the services of their ambulances in the north-western, central and southern areas of the county, while in the north-eastern area the Melton Mowbray Town ambulance is utilised, for which an annual grant is made by the committee.

## NURSING IN THE HOME.

Arrangements are in force with the County and District Nursing Associations whereby district nurses undertake general nursing in the home. The nursing of patients suffering from tuberculosis is also carried out. The County Nursing Association supervise the general arrangements on behalf of the County Council.

## TREATMENT CENTRES AND CLINICS.

Treatment of minor ailments is undertaken by the school medical officers at the various clinics in the county as follows :—

Coalville Health Centre, Avenue Road.

Hinckley Health Centre, The Lawns.

Leicester Health Centre, 8 St. Martin's.

Melton Mowbray Health Centre, Asfordby Road.

The Leicester health centre at 8 St. Martin's, was opened early in the year under review and the new centre at South Wigston was completed but not fully equipped until January, 1939.

A clinic at John Street, Loughborough, is used solely as a tuberculosis dispensary.

All the centres in the county are used for infant welfare clinics, ante-natal clinics, tuberculosis dispensaries, orthopædic clinics, school clinics and dental clinics with the exception of those at Leicester and Melton Mowbray. The former is not used as an orthopædic clinic, infant welfare clinic or ante-natal clinic, while the latter is not used as an orthopædic clinic or ante-natal clinic.

The following is a list of the infant welfare centres in the county :—

NAME OF CENTRE.	WHERE HELD.	SESSIONS.
Anstey	.... Church Room	.... 2nd & 4th Mondays, 2.30 p.m.
Asfordby	.... Parish Hall	.... 2nd & 4th Thursdays, 2.30 p.m.
Ashby-de-la-Zouch	Baptist Room, Market Street	Thursdays, 2.30 p.m.
Barrow-on-Soar	Baptist Chapel Room	2nd & 4th Wednesdays, 2.45 p.m.
Barwell	.... Methodist Schoolroom, Chapel Street	2nd & 4th Thursdays, 2.30 p.m.
Birstall	.... Church Hall	.... 2nd & 4th Wednesdays, 2.30 p.m.
Blaby	.... Baptist Room	.... 1st & 3rd Tuesdays, 2.15 p.m.
*Braunstone	.... Trinity Church Room	1st & 3rd Wednesdays, 2.30 p.m.
Coalville	.... Health Centre, Avenue Road	Tuesdays, 2.30 p.m.
Cosby	.... Methodist Schoolroom	1st & 3rd Wednesdays, 2.30 p.m.
Desford	.... Village Institute	.... 1st & 3rd Tuesdays, 2 p.m.
Earl Shilton	.... Co-operative Hall	.... 1st & 3rd Thursdays, 2.30 p.m.
Enderby	.... Mission Room	.... 1st & 3rd Wednesdays, 2 p.m.
Glenfield	.... Parish Room	.... 2nd & 4th Tuesdays, 2.30 p.m.

NAME OF CENTRE.	WHERE HELD.	SESSIONS.
Hinckley	.... Health Centre, The Lawns	Tuesdays, 2.30 p.m.
Hugglescote	.... Baptist Room	.... 2nd & 4th Mondays, 2.30 p.m.
Ibstock	.... Baptist Chapel School- room	.... 2nd & 4th Thursdays, 2.30 p.m.
*Kegworth	.... Church Room	.... 2nd & 4th Wednesdays, 2.30 p.m.
Kibworth	.... Village Hall	.... 2nd & 4th Wednesdays, 2.30 p.m.
Lutterworth	.... Church Hall	.... 1st & 3rd Thursdays, 2.30 p.m.
Melton Mowbray	.... Health Centre, Asfordby Road	.... Wednesdays, 2 p.m.
Mountsorrel	.... Reading Room	.... 1st & 3rd Tuesdays, 2.30 p.m.
Narborough	.... Robjohn Hall	.... 2nd & 4th Mondays, 2.15 p.m.
Oadby	.... Baptist Schoolroom	.... 2nd & 4th Wednesdays, 2.45 p.m.
Quorn	.... Village Hall	.... 1st & 3rd Wednesdays, 2.30 p.m.
Rearsby	.... Church Leys	.... 1st & 3rd Tuesdays, 2.30 p.m.
Rothley	.... Village Hall	.... 1st & 3rd Mondays, 2.30 p.m.
Shepshed	.... Methodist Schoolroom	.... 1st & 3rd Wednesdays, 2.30 p.m.
Sileby	.... Pochin Hall	.... 1st & 3rd Tuesdays, 2.45 p.m.
South Wigston	.... Congregational Schoolroom	.... 2nd & 4th Tuesdays, 2 p.m.
Syston	.... Church Hall	.... Mondays, 2.30 p.m.
Thurmaston	.... Methodist Schoolroom	.... Tuesdays, 2.30 p.m.
Whetstone	.... Congregational Schoolroom	.... 2nd & 4th Tuesdays, 2.30 p.m.
Whitwick	.... Methodist Schoolroom	.... Mondays, 2.30 p.m.
Wigston Magna	.... Co-operative Hall	.... 2nd & 4th Thursdays, 2.30 p.m.
Wigston Central	.... Congregational Schoolroom	.... 2nd & 4th Wednesdays, 2 p.m.

\*Opened March, 1938.



## HOSPITALS—PUBLIC AND VOLUNTARY.

*Infectious Disease Hospitals.*—The number of beds available in the county is 143 and these are distributed as follows :—

				BEDS.
Markfield Isolation Hospital	....	....	....	76
Melton Mowbray Isolation Hospital	....	....	....	27
Hinckley Isolation Hospital	....	....	....	23
Blaby Isolation Hospital	....	....	....	17
Total				143

At Markfield Isolation Hospital there are three resident medical officers, while the other isolation hospitals are served by part-time medical officers.

*Tuberculosis Institutions.*—Treatment of pulmonary tuberculosis is carried out at the county sanatorium, Markfield ; a full report of the year's work at this institution will be found in another section of this report.

*Small-pox Hospitals.*—No alterations have been made in the arrangements for the treatment of this disease. Two hospitals are available in the county, Syston Small-pox Hospital, 15 beds, and Snarestone Small-pox Hospital, 23 beds. In addition a reciprocal arrangement is in force between the County Council and the Leicester City Authority for the reception of cases of small-pox. Details of this arrangement have been given in previous reports.

*Voluntary Hospitals.*—The Public Assistance Committee make a grant to the Leicester Royal Infirmary, Market Harborough Cottage Hospital, Hinckley Cottage Hospital and Lutterworth Cottage Hospital for the reception of acute sick into those institutions.

Under the Authority's scheme for the operative treatment of enlarged tonsils and adenoids, in school children, provision is made for the use of the cottage hospitals at Ashby-de-la-Zouch, Market Harborough, Melton Mowbray and Hinckley, and the Loughborough General Hospital.

The arrangements for the hospital treatment of maternity cases remain as in previous years and such cases are admitted to the Leicester and Leicestershire Maternity Hospital, the Leicester City General Hospital and the cottage hospitals at Market Harborough and Lutterworth. An arrangement also exists with the Hospital of St. Cross, Rugby, and the Nuneaton General Hospital for the reception of maternity cases from parts of Leicestershire adjacent to the Warwickshire boundary.

*Public Assistance Institutions.*—In addition to acute sick which are treated at all the public assistance institutions, beds for maternity patients are provided at Bosworth Park, 2; Loughborough, 1; Market Harborough, 1 and Melton Mowbray, 2.

**The accommodation available in the Institutions  
provided by the County Council is as follows :—**

NAME OF INSTITUTION.		NO. OF BEDS.	NURSING STAFF.
(1) PUBLIC ASSISTANCE INFIRMARY			
Bosworth Park	....	170	Matron, assistant matron, 5 sisters, 26 assistant nurses, 4 male nurses.
(2) PUBLIC ASSISTANCE INSTITUTIONS.			
Blaby	....	26	Matron, 1 head nurse, 3 assistant nurses.
Loughborough	....	85	1 superintendent nurse, 2 trained nurses, 10 assistant nurses, 4 male nurses.
Lutterworth	....	8	Matron, assistant matron, 3 assist- ant nurses.
Market Harborough	....	56	Matron, 1 head nurse, 8 assist- ant nurses.
Melton Mowbray	....	35	1 head nurse, 2 trained nurses, 6 assistant nurses, 1 male nurse.
Mountsorrel	....	43	1 head nurse, 3 assistant nurses.
(3) TUBERCULOSIS INSTITUTIONS.			
Markfield Sanatorium		130	Matron, assistant matron, 8 sisters, 9 staff nurses, 22 probationers.
(4) INFECTIOUS DISEASE HOSPITALS.			
(OTHER THAN SMALL-POX).			
Markfield	....	76	See Markfield Sanatorium.
Blaby	....	17	Matron, sister, staff nurse, and 5 probationer nurses.
Hinckley	....	23	Matron, sister, staff nurse, 2 assistant nurses and 4 probationer nurses.
Melton	....	27	Matron, sister, 2 staff nurses, 1 assistant nurse and 4 probationer nurses.
(5) SMALL-POX HOSPITALS.			
Snarestone	....	23	*Matron, 1 staff nurse.
Syston	....	15	*1 staff sister.

\*Additional staff engaged as required.

# ADMINISTRATION OF MEDICAL SERVICES TRANSFERRED UNDER THE LOCAL GOVERNMENT ACT, 1929.

## INSTITUTIONS.

In addition to Bosworth Park Public Assistance Infirmary there are the following public assistance institutions in the county :—Loughborough, Market Harborough, Melton Mowbray, Mountsorrel and Blaby. Details of the accommodation at these institutions and particulars of the nursing staff are given in a previous table.

## PUBLIC ASSISTANCE MEDICAL OUT-RELIEF.

A table showing the various districts and the medical officers in charge will be found at the beginning of this report.

No difficulties have been encountered during the year in the administration of medical out-relief and no alterations have occurred in the constitution of the districts. The following staff changes were made :—The appointment of Dr. S. T. Cuddigan to succeed Dr. G. C. B. Atkinson of Long Clawson; Dr. B. H. Moore to succeed Dr. P. Drummond at Hallaton and Dr. F. P. Freeman to succeed Dr. T. W. Crowley at Lutterworth.

## VACCINATION.

The districts of the public vaccinators in the county number 30, and those of the vaccination officers total 14.

The following is a summary of the vaccination officers' returns rendered to the Registrar General respecting the vaccination of children whose births were registered from January 1st to December 31st, 1937.

(i) No. of births entered in Birth Lists as registered during 1937	....	....	....	....	....	3,847
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(ii) Statement relating to the births on 31st January, 1939 :—

(a) No. successfully vaccinated	....	....	190
(b) No. insusceptible of vaccination	....	....	2
(c) No. had Small-pox	....	....	—
(d) No. of Statutory Declarations received	....	3,434	
(e) No. died unvaccinated	....	....	123
(f) No. temporarily unaccounted for	....	....	67
(g) No. otherwise unaccounted for	....	....	31
		—————	3,847



(iii) No. of cases of children successfully vaccinated after Statutory Declaration had been received (included in sub-heading (d))	....	....	....	3
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## INSTITUTIONAL PROVISION FOR THE CARE OF MENTAL DEFECTIVES.

Provision is made for the care of mental defectives at Stretton Hall, near Leicester, which is approved for the reception of 160 cases as follows :— 60 medium and high grade males over sixteen years of age ; 50 medium and high grade females over sixteen years of age ; 20 medium grade females under sixteen years of age and 30 cot and chair cases of either sex. On 31st December, 1938, 145 Leicestershire cases were on the register of the institution.

The Loughborough Institution has been approved under Section 37 of the Mental Deficiency Act, 1913, for the reception of 40 adult female defectives, and on December 31st last, 35 cases were on the register of the institution.

The Board of Control has also approved the Mountsorrel Public Assistance Institution for the reception of 23 adult male defectives, and the number of cases in this institution on December 31st, 1938 was 10.

## MATERNITY AND CHILD WELFARE.

### MIDWIFERY AND MATERNITY SERVICES.

#### GENERAL STATISTICAL PARTICULARS.

During the year 229 midwives notified their intention to practise, 19 left the county and 4 voluntarily surrendered their certificates under the Midwives Act, 1936.

Of the 229 county midwives who notified their intention to practise, 227 hold the certificate of the Central Midwives' Board, and the remaining two belong to the bona-fide classification.

Inspection of the midwives is carried out by four members of the county health visiting staff to each of whom a district is assigned. Three of these officers are specially appointed county health visitors, and the fourth is the superintendent health visitor under whose supervision the work in all the districts is undertaken.

The inspectors made 543 visits during the year. It was not found necessary as a result of these inspections to report any breach of the rules either to the local supervising authority or to the Central Midwives' Board.

The returns received during the year from the county midwives were as follows :—

Medical help records	....	....	....	....	834
Notice of liability to be a source of infection	....	....	....	....	86
"Laying out of the dead" records	....	....	....	....	89
Notice of death of mother or child—Child	....	....	....	....	24
Mother	....	....	....	....	2
Stillbirth records	....	....	....	....	38
Notice <i>re</i> artificial feeding	....	....	....	....	98

The midwives called in medical help in 37 per cent. of the cases attended by them.

The chief causes for requesting medical help for the mother were :—ruptured perineum, 244 ; difficult labour, 159 ; malpresentation, 61 ; raised temperature, 61 ; ante-partum hæmorrhage, 35 ; adherent placenta, 25 ; post-partum hæmorrhage, 23 ; abortion, 19 ; miscarriage, 21 ; albuminuria, 26 ; varicose veins, 11.

The chief causes of help required for the child were :—discharge from the eyes, 35 ; feebleness, 30 ; prematurity, 18 ; abnormality, 19.

The records show that 3,885 cases were attended by midwives during the year and of this number 2,252 were taken by them alone. In the remaining 1,633 cases both doctor and midwife were in attendance.

#### *Doctor's fees in special cases.*

During the year no application was received for payment of a doctor's fee under these arrangements.

#### *Inspection of Midwives.*

It was not found necessary to suspend any midwife from duty through being in contact with infectious disease.

#### *Midwives Act, 1918.*

During the year 651 claims were passed for payment under the provisions of this Act.

*Sterilized Maternity Outfits.*

These are supplied at cost price through the Health Department to the County Nursing Association for distribution to midwives. Independent midwives practising in the county may also avail themselves of this service on the same terms.

**MIDWIVES ACT, 1936.**

The midwifery service has been administered as hitherto through the Leicestershire County Nursing Association.

*Whole-time Midwives.*

Towards the end of the year the number of whole-time midwives was increased from ten to eleven, owing to the extra work in the Coalville area due to the retirement of an independent midwife with a large practice.

**Analysis of Work Done by Whole-time Midwives.**

DISTRICT	CASES BOOKED		CASES COMPLETED		Cases Can- celled	VISITS PAID	
	Mid- wifery	Mater- nity	Mid- wifery	Mater- nity		Ante- Natal	During Puer- perium
Hinckley ....	251	20	237	32	25	1131	5511
Coalville ....	189	76	163	72	26	1898	4306
Melton Mowbray ....	66	96	51	90	6	432	2761
Donisthorpe ....	27	24	31	23	2	333	893
TOTALS ....	533	216	482	217	59	3794	13471

*District Nursing Associations.*

During the year 84 district nurse-midwives employed by 78 district nursing associations have taken 1,161 midwifery and 703 maternity cases. These nurses are stationed in the rural areas and undertake general district nursing as well as midwifery, as there would not be enough cases to keep them fully employed without making the area too wide for the safety of the mothers.

Four midwives voluntarily surrendered their certificates during the year making a total of thirteen midwives who have been compensated since the inception of the Act. The period during which compensation is payable

on the surrender of a certificate ends on July 30th, 1939. No midwife has been compelled during 1938 to surrender her certificate on account of age or infirmity.

#### *Necessitous Cases.*

The usual arrangements have been made for the whole or partial remission of midwifery fees to necessitous cases. Under the scheme fees are also paid to nursing associations in respect of necessitous midwifery patients, the maximum payment being 35/-, and during the year 28 associations have received fees on account of 49 cases.

#### *Emergency Staff.*

The average number of midwives employed on the emergency staff of the County Nursing Association for duty as the result of sickness, holidays and contact with infection was 11. They have been fully employed during the year, each having worked an average of 46 weeks out of a possible 48 weeks.

### ANTE-NATAL SERVICES.

#### *Ante-Natal Examinations by General Practitioners.*

This section of the scheme provides for two ante-natal examinations of uninsured expectant mothers, one being a general medical examination early in pregnancy and the other a full obstetrical examination between the 34th and 40th weeks. The doctor is paid a fee of 5/- for each examination, together with travelling expenses.

The total number of expectant mothers referred by midwives to general practitioners during the year was 814; of these 429 had two medical examinations, 122 one examination and in the remaining 263 no report or claim for fee was received from the doctor.

It is satisfactory to note that the proportion of cases completely dealt with under this service is greater than the previous year though there is still room for improvement. The success of this service depends on the whole-hearted co-operation of the midwives and doctors in the county.

#### *Report on the work of the Ante-natal Clinics.*

There have been no fundamental changes in the organisation of the ante-natal work during the year but a general review shows progress and development in each of the existing clinics. The opening of a new centre at South Wigston promises useful extension of the scope of this work in the county.

**Ante-natal Clinics**

	Coalville	Hinckley	Wigston	Totals
Number of Sessions	43	22	22	87
Number of Expectant Mothers who attended during year ....	259	228	98	585
Total number of attendances ....	535	484	293	1,312
Average attendances per meeting ....	12.4	22.0	13.3	15.1

The figures of attendance at the three clinics during 1938 are given above. The only unusual feature of these figures is the increase in the total and average number of attendances at Hinckley during the year.

In the administration of an ante-natal scheme, it must never be forgotten that good work is indissolubly linked to thoroughness and attention to detail and above all, to the full consideration of the personal aspect.

Ante-natal care may be said to comprise three essential elements; physical examination, advice and instruction, and supervision. The first two demand that adequate time be allotted to each case and that no session be long enough to exhaust the doctor's mental energy and alertness and the third involves the necessity for each patient to make a sufficient number of attendances during her pregnancy.

It is obvious that the words "adequate" and "sufficient" cannot be dogmatically translated into figures but will vary within wide limits according to the mental and physical as well as the environmental condition of the individual, but it is not unreasonable to state that when numbers exceed an average of fifteen per session, efficiency is bound to vary inversely with any increase in numbers. A striking illustration of this is seen in the above table of figures for 1938. At Wigston when the average attendance per meeting was 13.3 the average number of attendances per patient was three, whereas at Hinckley the corresponding figures are 22 and 2.1.

The arrangement whereby cases of severe complications of pregnancy or of doubtful diagnosis are sent for consultation to the obstetrician at the Leicester and Leicestershire Maternity Hospital has proved very useful



for patients living in the Wigston area. For obvious reasons this service is not so readily available for patients who live in the Coalville and Hinckley areas, although patients who are fit to make the journey are occasionally sent.

The alternative scheme by which arrangements can be made for the consultant obstetrician to visit the Coalville or Hinckley Clinics has proved still more unpracticable because firstly it is usually undesirable to wait the two weeks in which arrangements can be made for his visit and secondly there is not at any given time a large enough number of such cases attending any one clinic to justify a hospital consultant's journey.

When the patients attend the ante-natal clinics most of them are accompanied by the midwives who are to be in charge of the cases at their confinements. In mild disorders when the patient will probably not need a doctor, or where she cannot afford her own doctor's fees, the midwife is informed of the details of the case and sends a pink slip to summon the doctor if she needs medical help when the patient is in labour.

In cases of more serious abnormality the patient is sent at once to her own doctor with a letter explaining her case, and continues to attend the clinic if the doctor desires.

The county authority has at the Maternity Hospital, four beds which are always available for complicated cases. During the year 1938 only four patients from the ante-natal clinics occupied these beds, although many others with normal pregnancies chose to book other beds for themselves at the same hospital.

The vital question of general hygiene including the woman's clothing, diet, meal times, exercise and rest, is still far from getting the attention it deserves. Perhaps at some future time more health visitors' time or even some help by other trained workers may be available, but at present one must frankly admit that much more educative work should be done than is at present possible and that the importance of this side of the work is immense.

It remains too a regrettable fact that knowledge of dietetics, as of needlework, acquired at school is not applied to daily life afterwards and until this difficulty is overcome, much of the splendid work of modern education must fall short of its object, and the need for teaching, in infant welfare centres and clinics, must claim a very large proportion of our energies in the service of preventive medicine.

M. E. WESTON.

C. WALTERS.

## INFANT WELFARE CENTRES.

All the infant welfare centres in the county are controlled by the County Council with the assistance of a voluntary committee at each centre.

Two additional centres were provided during the year at Braunstone and Kegworth respectively, bringing the total number up to 36.

Sessions are held weekly at 7 of the centres and fortnightly at the remaining 29, in accordance with the needs of the district in which the centre is situated.

The staff attached to the centres comprises a medical officer and a health visitor. Each session is attended by the health visitor and the medical officer attends at alternate sessions.

There has been an appreciable increase in the work at the centres during the year, due not only to the provision of two new centres but also to an all-round increased attendance. Only 8 of the centres showed a decrease in attendance of mothers and infants during the period under review.

*General Administration.*

The general administration of infant welfare centres in the county is dealt with centrally, but a certain measure of control for each centre is left in the hands of the voluntary committee.

Although the county is now fairly well provided with infant welfare centres it would be impossible to extend the service to every family owing to the scattered nature of the population in rural areas. Sympathetic consideration is given to all applications for the establishment of new centres but the additional work thus devolving on the medical and health visiting staff is hardly justified unless reasonable attendances are assured. Moreover the present staff would have to be augmented if any extension of the service were contemplated.

In order to supplement the work at the centres and ensure that all infants and toddlers come within the purview of the scheme even though their homes are remote from any welfare centre, a system of periodic home visiting by the health visiting staff is in operation.

Special attention is given to the supervision of pre-school children, a group so often apt to escape the vigilance of the infant welfare or school

medical service. Home visits are made regularly by the health visitors and parents are encouraged to bring their toddlers to a welfare centre if one is within a reasonable distance.

This is hardly going far enough, however, and as pointed out in previous reports the gaps in the service should be bridged so that all children in the county are under the direct supervision of the medical officers. A high incidence of preventable defects and chronic disease will continue to exist until pre-school children are accorded periodic medical inspection and similar treatment facilities to those available for school children.

#### *Clinical Work.*

Each infant welfare centre is attended at regular intervals by the medical officer who examines each infant attending the centre for the first time and advises the mother on matters relating to the child's health and general management. No treatment is undertaken at the welfare centres as the work is directed towards the prevention of disease. In those cases where treatment is necessary the mother is advised to consult her own doctor. Special treatment such as that for orthopædic cases and abnormal eye conditions is provided by the Authority.

#### *Educational Work.*

Lectures are given at each session held at the welfare centres and every effort is made to educate the mother in the principles of mothercraft in an endeavour to improve the health and environment of the children. In spite of this, however, ignorance amongst parents still exists and many are indifferent to the advice given.

It is hoped that the mothers of the next generation who are receiving instruction in mothercraft and domestic science in the senior schools will appreciate all the more the facilities available through the maternity and child welfare services.

The attendance at welfare centres of senior girls during their last year at school when they are receiving instruction in mothercraft is to be recommended.

#### *Statistics.*

During the year 908 meetings were held at the various centres, an increase of 34 on last year. The total number of mothers on the registers was 4,136 and the number of attendances made 42,063. The figures for 1937 were 3,660 and 37,236 respectively.



The total number of infants under one year was recorded as 2,758 and the number of attendances made was 22,535. The number of toddlers attending the centres was 2,696 and these made a total of 24,173 attendances.

During the year 1,737 women, 1,913 infants under one year of age, and 516 toddlers attended the centres for the first time. The corresponding figures for last year were 1,581, 1,534 and 476 respectively.

The medical officers made 481 visits to infant welfare centres during the year, 51 visits more than in 1937. The visits of the individual medical officers were as follows:—Dr. Fairer 4; Dr. Lisney 44; Dr. Coward 10; Dr. Weston 155; Dr. Walters 169; Dr. Thompson 97; Dr. Lane 2.

The numbers of lectures given at infant welfare centres by medical officers and health visitors during the year were:—

Medical officers 345; health visitors 292; special lectures 6.

The medical officers made 4,969 clinical examinations during 1938, and 1,886 children were examined for the first time. The total number of weighings carried out by the health visitors was 37,987.

The principal defects observed by medical officers were:—skin conditions 202; bronchitis 144; hernia 128; gastric trouble 125; phimosis 124; umbilical hernia 105; naso-pharyngitis 96; diarrhoea 69; external eye conditions 61; rickets 44; strabismus 44; enlarged glands 42; ear diseases 35.

#### *Supply of Milk to Necessitous Mothers.*

One pint of milk per day is supplied free under this scheme to (a) expectant mothers within three months of their confinement; (b) nursing mothers; and (c) infants under two years who are certified to be in need of extra milk for health reasons.

Each application is considered according to an income scale adopted by the committee and a health visitor carefully investigates the financial circumstances before the grant is made.

If the patient attends an infant welfare centre a certificate of necessity is obtained, when possible, from the medical officer in charge. The grant is issued subject to the patient's attendance at an infant welfare centre if one is within reach.

Only liquid milk is supplied and where it is possible to obtain it, "Accredited" milk is provided.

During the year 1,533 applications were received and 1,306 grants were approved by the Maternity and Child Welfare Committee for periods not exceeding two months, after which time the cases were re-considered. This is an increase of 439 on the number approved during 1937.

#### MATERNAL CARE.

##### *Maternal Mortality.*

The investigation of maternal deaths occurring in the county is undertaken by Dr. Lisney in accordance with the principles laid down by the Ministry of Health.

All reports of cases investigated are treated as strictly confidential and are forwarded direct to the Chief Medical Officer of the Ministry of Health. No copies are retained locally.

In carrying out investigations full co-operation is sought with the general practitioners. Apart from the value of the reports for statistical purposes, problems arising locally in connection with the practice of midwifery can be discussed with the general practitioners and appropriate action taken by the Authority.

##### *Puerperal Pyrexia.*

Application can be made to the health department by any general practitioner wishing to avail himself of the facilities provided in the county.

Cases requiring isolation and treatment in hospital are admitted to the Markfield, Melton and Hinckley Isolation Hospitals where special beds are available for such cases.

##### *Provision of Consultants.*

Consultants with special experience in obstetrics have been appointed and are available to any general practitioner. The following are the main provisions governing this service :—

- (i.) The services of a consultant shall be available to any general practitioner in the administrative county requiring assistance for a patient in difficulties or for complications arising during pregnancy, at confinement or up to four weeks after confinement.
- (ii) Special application by a practitioner for the services of a consultant must be made to the county medical officer of health.

In urgent cases occurring outside office hours, application may be made direct to the consultant. In all such cases both the practitioner and the consultant must notify the county medical officer of health within twenty-four hours of the consultation having taken place.

- (iii) When a consultant has been called in, application will be made by the County Council to the patient for the recovery of the cost of the consultant's services.

The scheme has now been further augmented by the provision of a "flying squad" or emergency unit. Full particulars are given later in this report.

During the year consultants were called in for 12 complicated cases and 2 cases of puerperal fever and pyrexia.

#### BIRTH CONTROL.

The arrangement for the attendance of county patients at the Leicester City birth control clinic still continues.

The types of cases considered suitable include women suffering from some serious constitutional condition such as tuberculosis, heart disease, kidney disease, diabetes, profound anæmia, certain types of arthritis, and toxic goitre. Women suffering from mental disorder including inheritable forms of insanity, epilepsy or feeble-mindedness, and women suffering from local gynaecological affections or malformations are also sent to the clinic.

The number of cases referred either by their own doctors or by a member of the county medical staff during 1938 was 57 as compared with 6 during 1937. These cases included women suffering from heart disease, tuberculosis, severe debility, contracted pelvis and other general and local pathological conditions.

#### REPORT OF THE MATERNAL MORTALITY OFFICER,

Dr. A. A. LISNEY, Deputy County Medical Officer

The maternal mortality rate shows a slight increase on that of the previous year, the figures being 3.12 and 3.01 respectively.

The returns of maternal mortality during the years 1929-1938 are set out in the following table :—

**Leicestershire Maternal Mortality per 1,000 Births.**

Year	No. of Puerperal Deaths.			Rate per 1,000 Births	
	Total Births	Sepsis	Other Causes	Total	
1929	5,013	9	15	24	4.8
1930	5,201	7	10	17	3.27
1931	5,179	5	12	17	3.28
1932	5,039	5	12	17	3.37
1933	4,593	7	15	22	4.79
1934	4,919	6	11	17	3.46
1935	4,475	7	10	17	3.80
1936	4,598	6	12	18	3.91
1937	4,658	10	4	14	3.01
1938	4,807	3	12	15	3.12

The maternity services of the county were further augmented during the year by two important additions :—(a) the provision of an emergency unit ("Flying Squad"), and (b) a scheme for the dental treatment of expectant and nursing mothers. Full details of these schemes are given below :—

*Emergency Unit ("Flying Squad").*

This scheme was adopted by the Maternity and Child Welfare Committee when it was decided :—

1. That the obstetric consultants attached to the Leicester Royal Infirmary be appointed as special consultant officers for this service.
2. That the fees to be paid to the consultants shall be as follows :—
  - (a) Where the case is purely consultative as under the present scheme of consultants £3. 3. 0.
  - (b) Where the consultant undertakes emergency treatment, including fee for consultation £5. 5. 0.

Mileage to be paid at the rate of 1/- per mile one way as at present.

3. That a maternity outfit be purchased at an approximate cost of £30 ; the outfit to be kept at the Leicester Royal Infirmary sterilized after use and ready for the next call.

4. That arrangements be made with the Leicester Royal Infirmary for the services of a nurse to be available at any time day or night and that when an urgent call is received she will accompany the consultant in his own car, taking with her the outfit for the use of the consultant.
5. That payment to the Leicester Royal Infirmary for the services of the nurse shall be made at the end of each financial year, according to the actual number of journeys made by her being ascertained.
6. That the procedure to be adopted by a general practitioner for obtaining the services of the emergency unit shall be the same as under the present scheme of consultants.
7. That recovery of fees, etc., under the County Council's scheme for maternity services of the county shall apply to this scheme.
8. That in cases where the patient is able to pay the consultant's fee the consultant will not charge the Maternity and Child Welfare Committee but will obtain his fee from the patient.

If, however, the "Flying Squad" Unit (Nurse and equipment) is used for any such case a charge of £2. 2. 0. will be made to the patient by the Maternity and Child Welfare Committee, and the consultant will notify the County Medical Officer of its use as soon as possible.

9. That where the "Flying Squad" Unit is used for other cases the Maternity and Child Welfare Committee will send the patient an account for the consultant's fee and the use of the "Flying Squad" unit, and if necessary the Committee will assess the amount to be paid according to the financial circumstances of the patient.

#### DENTAL TREATMENT FOR EXPECTANT AND NURSING MOTHERS.

##### *Those who benefit under the Scheme.*

The expectant and nursing mothers referred for dental treatment come from three sources, the ante-natal clinics, infant welfare centres, and General Practitioners, and are uninsured women.

##### *General Working Principles.*

Before a patient is referred to the dental clinics for treatment, a certificate must be given by the medical officer of the ante-natal clinic or



infant welfare centre, stating that the patient is in a fit state to receive such treatment.

In the event of a case requiring a general anæsthetic a medical officer has to be in attendance.

Sessions for the inspection and treatment of the mothers are held at the five dental clinics at Coalville, Hinckley, Melton Mowbray, Leicester and South Wigston on each Saturday morning. The applications for treatment are dealt with in rotation and arrangements for giving treatment are made as expeditiously as possible.

All conservative treatment is undertaken by the Council's dental surgeons, but it has been found necessary to make other arrangements with regard to the making of dentures.

*Cost of Treatment and the recovery of Fees.*

The charges are based on the National Health Insurance scheme as follows :—

FILLINGS AND EXTRACTIONS.

Scalings	....	....	....	....	5/-
Fillings	....	....	....	....	7/6 per tooth
Extractions :—					
1st tooth	....	....	....	....	2/6
additional teeth	....	....	....	....	1/- per tooth
Maximum fee for extractions	....	....	....	....	25/-
General anæsthetic	....	....	....	....	7/6

DENTURES.

Plate with 4 teeth	....	....	....	£1. 11. 0.
additional teeth	....	....	....	5. 0. per tooth
Maximum fee for 1 denture....	....	....	....	£2. 15. 0.
Maximum fee for 2 dentures	....	....	....	£5. 10. 0.

REPAIRS.

According to requirements.

On the completion of dental treatment the amount which the patient is asked to pay is based on a scale which has been adopted by the Committee.

The salary of the dental surgeon and his assistant, and the cost of dental apparatus, material and dentures will be apportioned between the Maternity and Child Welfare and Education Committees at the end of the financial year.

## THE MIDWIVES ACT, 1936.

The entire county is now covered by domiciliary midwifery services. Arrangements between the County Council and the County Nursing Association have been made by which district nurse-midwives are employed through the agency of district nursing associations. These arrangements provide for the greater portion of the county while the remaining portion has been dealt with by the appointment of whole-time midwives by the County Council and by special arrangements with the Supervising Authorities at Loughborough and Market Harborough.

The following is a summary of the chief aspects of the administration and working arrangements since the inception of the service :—

- (1) The County Nursing Association and affiliated associations have carried out their obligations under the Act in a satisfactory manner.

The requirements of the Midwives Act, 1936, have necessitated the establishment of additional district nursing associations and 8 such associations, affiliated to the County Nursing Association, have been formed. In those areas where it was not possible to form an Association, 11 whole-time midwives have been appointed as follows :—

Coalville and District	....	....	5
Hinckley	....	....	3
Melton Mowbray	....	....	2
Moir and Donisthorpe	....	....	1

- (2) The general arrangements with regard to grants have worked satisfactorily. Telephones have been installed in the county in those districts where such provision was deemed necessary, the total number provided being 35.

Eight cars have been provided by the County Council in order to enable district nursing associations to include areas not previously covered and a car was also provided for a whole-time midwife to enable her to cover a district with which she would otherwise not be able to deal.

- (3) A number of nurse-midwives are maintained on the temporary staff of the County Nursing Association for relief duty, *i.e.*, relieving staff off duty on account of holidays, sickness and exposure to infection. They also temporarily fill vacancies and replace permanent staff who are taking post-graduate courses. During 1938 an average of 11 relief nurses each worked 46 weeks.

- (4) Since the inception of the Midwives Act, 1936, thirteen midwives have voluntarily surrendered their certificates and been compensated, 9 in 1937, 4 in 1938. These midwives practised in the following districts :—

Albert Village....	....	1	Glenfield	....	....	1	
Anstey	....	....	1	Loughborough	....	3	
Braunstone	....	....	1	Market Harborough	....	1	
Coalville	....	....	1	Melton Mowbray	....	1	
Fleckney	....	....	1	Somerby	....	....	1
				Wigston Magna	....	1	

- (5) An Order under Section 6 of the Midwives Act, 1936, dealing with the prohibition of unqualified persons acting as maternity nurses for gain, was made by the Minister of Health to apply to the Urban District of Melton Mowbray coming into operation as from June 1st, 1938. The requisite notice was published in the press and medical practitioners, midwives and others whom it concerned were notified.

## INSTITUTIONAL PROVISION FOR MOTHERS AND CHILDREN.

### *Maternity Hospitals.*

An arrangement exists with the Leicester and Leicestershire Maternity Hospital for the reception of complicated cases into this hospital which receives an annual grant of £100 from the County Council. The maintenance charge for each patient is £2 . 5 . 0 per week. 6 cases were admitted during the year.

Complicated maternity cases from the county, other than puerperal pyrexia, are admitted to the Hospital of St. Cross, Rugby, and the Nuneaton General Hospital. One case was admitted to each during the year. One maternity case was also admitted in emergency to the Loughborough General Hospital. The County Maternity and Child Welfare Committee undertakes responsibility for the maintenance of emergency cases provided that the County Medical Officer is notified as soon as possible after the patient's admission, but approval of the Committee must be obtained before other than emergency cases can be admitted. Cases from homes unsuitable for a confinement are also admitted to the cottage hospitals at Market Harborough and Lutterworth. The recovery of the whole or part of the charge is subsequently considered by the Committee.

Facilities exist for the reception of unmarried expectant mothers at St. Saviour's Home, Northampton. During 1938, nine cases were admitted to this Home.

#### *Treatment of Children.*

Provision is made for the treatment of tubercular children at the County Sanatorium, Markfield, and further details will be found in a separate section of this report. Ill-nourished and delicate children of three and four years of age are received at the Children's Convalescent Home, Woodhouse Eaves.

The following is a report from the medical officer of the Home :—

Total number of children admitted	....	....	....	8
Average stay of each child	....	....	....	57.6 days
Average gain in weight	....	....	....	2.9 lbs.
State of health on discharge—				
Much improved	....	....	....	4
Improved	....	....	....	4

All the children were admitted because of debility due to various causes.

#### HEALTH VISITORS.

On December 31st, 1938, the health visiting staff consisted of the superintendent and 20 health visitors, a list of whom will be found at the beginning of this report. A summary of the work carried out during 1938 with the exception of that in connection with the school medical department, is appended herewith :—

##### Children under 12 months :—

First visits	....	....	....	3,927
Subsequent and special visits	....	....	....	23,842
Children 1-5 years	....	....	....	37,577
Total				<hr/> 65,346 <hr/>

##### Tuberculosis :—

First visits	....	....	....	338
Subsequent and special visits	....	....	....	4,201
Total				<hr/> 4,539 <hr/>

Attendances at infant welfare centres	....	949
,, at women's institutes	....	37
,, at ante-natal clinics	....	92
Lectures at infant welfare centres	....	253
,, at women's institutes	....	37
Attendances at tuberculosis dispensaries	....	294
,, at orthopædic clinics	....	172
Pre-natal visits	....	1,003
Other visits : <i>re</i> Stillbirths	....	79
,, Applications for milk	....	1,505
,, Child-life protection	....	229
,, Boarded-out children	....	187
,, Ophthalmia neonatorum	....	13
,, Puerperal pyrexia	....	42
,, Nursing homes	....	42
,, Practising midwives	....	543

### CHILD LIFE PROTECTION.

*Inspections of Children under the Children and Young Persons Acts, and Public Health Act, 1936.*

Under these acts inspections are carried out by the county health visiting staff on behalf of the Maternity and Child Welfare Committee.

Each child is visited at least once every three months, additional visits being made as circumstances require. A detailed report on the condition of the child is made at each inspection and these reports are scrutinised by the deputy county medical officer. Should the condition of the child or its environment be unsatisfactory, the home is visited by a medical officer who makes a special report and recommends such action as is necessary.

The following is a summary of the changes in the register during the year :—

No. of cases on register on December 31st, 1937	67
,, of new cases	32
,, returned to parents	8
,, adopted	3
,, attained nine years of age	5
,, left county	7
,, transferred to new foster-parents	6
,, of cases on register on December 31st, 1938	70



The Maternity and Child Welfare Committee insist on a yearly inspection of each school where boarders under the age of nine years are received. Nine such schools were inspected.

*Boarded-out children.*

Supervision of these children is carried out by the health visiting staff who make routine visits of inspection every six weeks.—When necessary, owing to special circumstances, more frequent visits are paid and in all cases a detailed report of the conditions found at each visit is made by the health visitor. If circumstances require it, special visits are made by a medical officer.

### ORTHOPÆDIC TREATMENT.

Orthopædic treatment is available for any child under school age in the county. The scheme has been outlined in my previous reports and it is, therefore, not considered necessary to again include full details this year.

The county is fairly well covered by the present clinics and with the exception of the south-eastern portion access to the clinics is quite easy. This portion of the county is served by the Leicester City clinic and the Rugby clinic, but as was to be expected some difficulty has arisen with regard to the facilities for travelling. This is usually met by the payment of travelling expenses either by the Maternity and Child Welfare or the Public Assistance Committees.

Considerable progress has been made by the Leicestershire Voluntary Association for Cripples' Welfare and district committees have been formed in many villages. Others are in various stages of formation and it is hoped that before very long the whole county will be able to avail themselves of help through this association. Close co-operation exists between the officers of the health department and the voluntary association. Members of my staff attend the case committee which meets every fortnight when both old and new cases are reviewed and questions of travelling arrangements, home visiting and employment are considered. This voluntary association also undertakes home visiting and has proved extremely helpful in cases where pressure was required to convince parents that treatment was essential.

*Ascertainment.*

The same machinery is in operation for the ascertainment of cases requiring orthopædic treatment.

Cases are referred to the clinics by the Authority's medical officers, health visitors and by general practitioners. In this connection the infant welfare centres are invaluable as it is often possible for cases to be referred to the orthopædic surgeon at the earliest possible moment.

An interesting instance of this was the case of a baby who was seen by a medical officer, referred to the clinic, and examined by an orthopædic surgeon within twenty-six hours of birth.

### *Orthopædic Clinics and Hospitals.*

The following clinics in the county are open for the treatment of patients :—

#### (a) Coalville.

This clinic is held in the Health Centre, Avenue Road, Coalville, and is open on Monday and Wednesday afternoons at 1.30 p.m. The staff is supplied from the Coleshill Hospital and the surgeon is Mr. F. G. Allan. A health visitor carries out the clerical duties.

#### (b) Hinckley.

This clinic is held in the Health Centre, The Lawns, Hinckley and is open on Wednesday and Friday mornings at 9.30 a.m. As in the case of the Coalville clinic the staff is supplied from the Coleshill Hospital and the surgeon is Mr. F. G. Allan. A health visitor carries out the clerical duties.

Both these clinics are administered directly by the County Council.

#### (c) Loughborough.

This clinic is held at the Cripples' Guild, Packe Street, Loughborough and is open for treatment on Tuesdays, Thursdays and Saturdays. The staff consists of an orthopædic sister, one masseuse and four voluntary workers. The surgeon is Mr. S. A. S. Malkin.

#### (d) Leicester.

Treatment is available at the Leicester City orthopædic clinic, Richmond House, The Newarke, Leicester. This clinic is open every day and Mr. L. Morris is the orthopædic surgeon.

#### (e) Rugby.

This clinic is held at the Hospital of St. Cross, Rugby and is open every day. The surgeon is Mr. C. R. Hoskyn.

The following hospitals are available for in-patient treatment :—

Warwickshire Orthopædic Hospital, Coleshill.

Harlow Wood Orthopædic Hospital, Mansfield.

City General Hospital, Leicester.

Hospital of St. Cross, Rugby.

Leicester City Orthopædic Clinic (Short stay cases only).

#### *Additional Facilities.*

In addition to the treatment provided at the clinics mentioned previously, out-patient treatment is available at the Leicester Royal Infirmary. This is provided free of charge but the County Council assist financially in the provision of surgical appliances.

#### *After-Care Supervision.*

After in-patient treatment all cases attend the various clinics for observation and supervision. Where necessary cases are visited in their own homes by the medical staff or health visitors who report on the present condition of the patient.

Officially very little can be done as regards after-care in the homes by the Authority's staff, but valuable work is undertaken in this direction by the members of the Voluntary Association. Questions of training, employment and general social welfare are investigated and advice and assistance are offered where possible. Transport is also undertaken in cases where difficulties have arisen regarding the attendance at the clinic of patients living in the more rural parts of the county.

### NURSING HOMES.

The administration of the Public Health Act, 1936 (Registration of Nursing Homes), is undertaken by the County Council which is the local supervising authority for the whole county. No application has been received from a district council for delegation of powers to them under the Act.

Periodic inspections of the registered homes are carried out by Dr. Disney and the Superintendent Health Visitor. Before any application for a certificate of registration of a home is granted, full inquiry is made as to the suitability and qualifications of the applicant and an inspection of the premises is carried out to ensure conformation to the necessary standard.

The following are particulars concerning the administration of this section :—

	Nursing Homes.	Maternity Homes.	Nursing and Maternity Homes.
No. of new applications for registration during 1938 ....	—	1	1
No. of Homes registered 31/12/38	2	7	5
No. of orders made refusing registration ....	—	—	—
No. of orders made cancelling registration ....	—	—	—
No. of appeals against such orders	—	—	—
No. of Homes discontinued ....	—	1	1

Exemption from registration under the new Act was granted in six instances, viz., five cottage hospitals and one general hospital.

### WHOLE-TIME MEDICAL OFFICERS OF HEALTH.

*Local Government Act, 1933, Section III.*

Further discussions took place in the early part of the year in connection with a scheme for the county in accordance with the above Act and details of the final scheme submitted to the Ministry of Health and approved by them are given below :—

#### 1. *District requiring alone the whole-time services of a Medical Officer of Health.*

Loughborough Municipal Borough.

#### 2. *Districts combined for the whole-time services of a Medical Officer of Health.*

- (a) Ashby-de-la-Zouch Rural.
- Ashby-de-la-Zouch Urban.
- Ashby Woulds Urban.
- Castle Donington Rural.
- Coalville Urban.
- Shepshed Urban.

- (b) Blaby Rural.
- Lutterworth Rural.
- Market Bosworth Rural.
- Market Harborough Rural.

- (c) Billesdon Rural.  
Melton and Belvoir Rural.  
Melton Mowbray Urban.

3. *Districts appointing with the County Council a joint Medical Officer of Health and Assistant County Medical Officer.*

- (a) Oadby Urban.  
Market Harborough Urban.  
Wigston Urban.
- (b) Barrow-upon-Soar Rural.
- (c) Hinckley Urban.

It is possible that during 1939 certain modifications will be made in the scheme.

*Barrow-on-Soar Rural District.*

In accordance with the above scheme Dr. I. B. Lawrence was appointed as District Medical Officer of Health for the Rural District of Barrow-upon-Soar in December, 1938, but did not commence duty until April 1st, 1939.

### NATIONAL HEALTH CAMPAIGN.

As mentioned in last year's annual report, the National Health Campaign commenced in October, 1937, and continued until the end of March. Posters, show cards and folders, dealing with every aspect of the health services, were widely distributed in the county, and a special pamphlet entitled "Health Services in Leicestershire," was issued by this department. This publication gave details of all the services available in the county, with a short commentary on the scope and purpose of each branch.

At the beginning of the campaign, an assistant county medical officer approached the Federation of Women's Institutes, offering to give a limited number of lectures on the health services at institutes in the county. The response was such that the programme for the year was very quickly completed, and seven institutes who applied late had to be refused. Some of these have, however, been visited during 1939.



The following is a list of these special lectures given by Dr. A. W. S. Thompson during the year. Except where otherwise stated the subject directly concerned the health services :—

- |           |   |
|-----------|---|
| Jan. 4th  | Sharnford and Sapcote Women's Institute.                          |
| 10th      | Scraptoft Women's Institute.                                      |
| 11th      | Kirby Muxloe Women's Institute.                                   |
| 12th      | Twycross Women's Institute.                                       |
| 18th      | Great Glen Women's Institute.                                     |
| Feb. 2nd  | (1) Ashby Parva Women's Institute.                                |
|           | (2) Great Bowden Women's Institute.                               |
| 3rd       | Kibworth Women's Institute.                                       |
| 9th       | Ulverscroft and Copt Oak Women's Institute.                       |
| 17th      | Long Whatton Women's Institute ("Physical Fitness").              |
| 21st      | Birstall and Wanlip Women's Institute.                            |
| March 1st | Peatlings and Bruntingthorpe Women's Institute.                   |
| 3rd       | Humberstone Women's Institute.                                    |
| 8th       | Broughton Astley Women's Institute.                               |
| 17th      | Scraptoft Women's Social Hour. ("Social Hygiene").                |
| April 7th | Ullesthorpe Women's Institute.                                    |
| May 10th  | Fleckney and Saddington Women's Institute.<br>("General Health"). |
| Sept 8th  | Thrussington Women's Institute.                                   |
| Oct. 11th | Leicester Forest East Women's Institute.                          |

In addition to these, many lectures and talks were given by members of the staff at infant welfare centres and at meetings of various organisations. There is no doubt that at the present day the general public takes a very great interest in health, and educational work of this kind is now much easier to carry out and of greater value than it was a few years ago. There was a time when a lecture on health would have been regarded as, inevitably, a very boring business, but nowadays such lectures are eagerly sought after. The manner in which mothers at welfare centres listen to talks from the medical and nursing staff—straining their ears to hear what is being said amid the appalling din created by their lusty offspring—is praiseworthy, and very encouraging. Some day, perhaps, children at school will receive a proper ground-work of health knowledge as part of the normal curriculum ; but in the meantime the best we can do is to instil such ideas as we can into the—fortunately receptive—ears of our young mothers. In the present state of things the greatest factor in education of the public is the health visitor.

## AIR RAID PRECAUTIONS ACT, 1937.

### COUNTY SCHEME—CASUALTY SERVICES.

During the early part of 1938 work on the casualty services for the county, in accordance with the Air Raid Precautions Act, 1937, began in earnest and particulars are given below under the appropriate headings.

#### *First Aid Posts and Points.*

Local authorities were circularised and requested to give details of buildings suitable for conversion into first aid posts and points. The earmarking of such buildings was based on the original recommendation of the Home Office suggesting that school buildings be used as much as possible. On receipt of this information the buildings earmarked were inspected with a view to determining the cost of conversion. The entire scheme was finally submitted to the Home Office and with minor modifications was approved. Hardly had this approval been obtained, however, when it was learned that the whole of the administration in connection with first aid posts had been handed over to the Ministry of Health. This necessitated the cancellation of our original scheme and the preparation of a new one based on the requirements laid down by the Ministry of Health to the effect that all first aid posts should be located at hospitals, institutions or clinics. The work of formulating a new scheme is now practically complete.

#### *First Aid Parties.*

The preparation of a scheme for the provision of first aid parties in the more densely populated districts of the county was also in course of preparation during the latter half of the year. This necessitated the earmarking of suitable buildings as first aid party depots adjacent, or as near as possible, to the depots for rescue parties which were being provided in a scheme prepared by the county surveyor. The scheme for first aid parties was practically complete by the end of the year.

#### *First Aid Training.*

The training of volunteers in first aid, commenced in the early part of the year, was in full swing by the summer. Two types of courses were given, a long course consisting of not less than 12 hours devoted to theoretical and practical work under the direction of a doctor, and a short course of about 5 meetings of one hour's duration at weekly intervals under a qualified instructor. The former course is intended for persons taking more responsible duties in time of emergency such as those entailed by being attached to a first aid post. Most of the training in first aid has been arranged by the St. John Ambulance Brigade who have rendered a very

efficient service in this respect. Training in anti-gas was run concurrently with the first aid training in order to ensure that each volunteer received a maximum amount of training in a minimum of time. By the end of the year a large number of volunteers had been suitably trained in first aid and anti-gas.

### *The September Crisis.*

When the crisis came so unexpectedly it was realised how unprepared the county really was as regards the casualty services. Arrangements were rushed through as quickly as possible so that had an emergency followed the crisis there would have been some semblance of a workable scheme available. As no equipment had been distributed for the essential services by the Government, lists were made of the important drugs, first aid dressings, etc. and orders placed without delay with local firms. Arrangements were also made to have a stretcher-carrying fitment, as recommended by the Home Office, produced in sufficient quantities at a moment's notice and one sample fitment was constructed to assist in the earmarking of suitable vehicles for ambulances. Various tradesmen and other firms in the county were circularised asking for details with regard to the dimensions and type of their vehicles.

Hasty preparations were made for the conversion of suitable schools into first aid posts and meetings were held with the hospital officer of this area attached to the Ministry of Health. When the crisis passed orders for materials, drugs, dressings, etc. were cancelled as far as possible and it was found that the total liability of the County Council for the goods already supplied was approximately £30.

## **SANITARY CIRCUMSTANCES OF THE AREA.**

### **WATER SUPPLY.**

In the urban districts the only shortage occurred in the Ashby-de-la-Zouch and Ashby Wouds districts which get their supply from the Swadlincote and Ashby Joint Water Board. In these areas the water was cut off between the hours of 10 p.m. and 5 a.m. from February to June and August to December.

In the rural districts shortage occurred in the Ashby-de-la-Zouch Rural Area at Ravenstone, Swannington, Coleorton and Worthington and the Council carted water for drinking purposes. At the time of writing the regional water scheme, which will cover these villages, is nearly completed.

At Tilton-on-the-Hill, in the Billesdon area, there was a shortage, and this also occurred at Owston.

During the dry weather there was a shortage at Aston Flamville in the Blaby area and there was a serious shortage at Breedon-on-the-Hill in the Castle Donington Rural District in the middle of the year and a temporary supply was laid from a bore hole in the quarry. Public mains are now being installed and the regional scheme is nearing completion.

Last year mention was made of the unsatisfactory supply at Brough-on-Astley in the Lutterworth area and during 1938 there was still a great shortage and the water was unsatisfactory. However, the Leicester Corporation have agreed to supply water to this parish and a scheme is now being prepared.

In the Melton and Belvoir area there was a shortage at Coston, Garthorpe and Wymondham. A Ministry of Health Inquiry was held in January, 1938 and the scheme is still under consideration.

The County Council have received applications from two rural district councils in the county for contribution towards expenditure incurred in the provision of water supplies.

Particulars of these applications are given below :—

Authority.	Parishes Concerned	Estimated Cost of Scheme	Amount of grant made by County Council
Ashtby-de-la-Zouch R.D. ....	Coleorton, Heather, Osgathorpe, Ravenstone with Snibstone, Swannington and Worthington	£44,460	£7,500
Billesdon R.D. ....	Houghton and Billesdon ....	£13,295 (less £3,445 grant by City Cor- poration) £9,850	$\frac{3}{4}$ nett loss up to £100 in each of the 10 years.

Investigations as to the purity of the water have been systematically pursued throughout the county and during the year 798 samples have been submitted for analysis. The results are as follows :—

District.	Satisfactory.		Unsatisfactory	
	Chemical	Bacteriological	Chemical	Bacteriological
<b>MUNICIPAL BOROUGH</b>				
Loughborough ....	—	—	56	56
<b>URBAN DISTRICTS</b>				
Ashby-de-la-Zouch ....	—	—	2	—
Ashby Woulds ....	1	1	1	—
Coalville ....	9	41	38	40
Hinckley ....	15	15	11	12
Market Harborough ....	38	5	2	—
Melton Mowbray ....	3	5	—	—
Oadby ....	—	—	—	—
Shepshed ....	2	2	—	—
Wigston ....	—	—	—	2
<b>RURAL DISTRICTS</b>				
Ashby-de-la-Zouch ....	3	4	10	9
Barrow-on-Soar No. 1 ....	4	—	4	—
Barrow-on-Soar No. 2 ....	3	5	72	—
Billesdon ....	—	—	18	—
Blaby ....	11	8	43	10
Castle Donington ....	2	—	35	—
Lutterworth ....	21	6	28	7
Market Bosworth ....	54	—	45	—
Market Harborough ....	1	5	5	4
Melton and Belvoir ....	3	2	10	9
Totals ....	170	99	380	149

NOTE :—Most samples are subjected to both chemical and bacteriological tests.

At the beginning of 1938 only four counties in England had a large number of parishes without a piped supply. Of 216 parishes throughout the county 120 or 55.55 per cent. were without a piped water supply. During the year, however, there has been a slight improvement and more villages have now had a piped supply laid on.



Particulars of the more important extensions or improvements carried out during the year are given below :—

*Ashby-de-la-Zouch Urban District.*

The extension of water mains along the Leicester Road to supply New Packington and to the whole of the village of Blackfordby was completed during the year.

*Ashby Woulds Urban District.*

The Joint Water Committee have arranged to take an auxiliary supply from the South Staffs Water Co. Negotiations are proceeding for large extensions to their works and for the Ashby Woulds U.D.C. to become a constituent authority in the undertaking.

*Coalville Urban District.*

During the year 1,875 yards of 4 inch diameter water mains have been laid in various parts of the district.

A scheme has been submitted to the Ministry of Health which includes the modernisation and electrification of the Broom Leys Pumping Station and a boosted supply to the Bardon Hill and Battleflat districts at a total estimated cost of £7,400.

*Hinckley Urban District.*

The most important extension has been the laying of three-quarters of a mile of new 6 inch diameter mains from Leicester Road to Sketchley Road to increase the pressure of the supply in that area. A total of 1.04 miles of new mains have been laid.

*Melton Mowbray Urban District.*

New mains have been laid to building estates at Melbourne Lodge, Asfordby Road, and also between Burton Road and Cambridge Avenue.

The existing mains in Brook Street and Regent Street have been replaced by new 4 inch diameter mains and a satisfactory supply has been given to parts of the Burton Hill and Welby Lane districts since the joint water scheme has been completed.

*Shepshed Urban District.*

The mains have been extended 200 yards to new building estates.

*Wigston Urban District.*

Extensions are being made in the Wigston Fields area. Some 373 yards of new mains have been laid while 43 houses have had a piped supply laid on to sculleries to replace stand pipes in the yard.

*Ashby-de-la-Zouch Rural District.*

The Regional Water Scheme for Heather, Ravenstone, Coleorton, Swannington, Osgathorpe and Worthington, was nearing completion at the end of the year. The reservoirs and mains are finished but, owing to weather conditions, building operations at No. 2 pumping station have been delayed and it is hoped that completion will be accomplished early in 1939.

*Billesdon Rural District.*

Leicester Corporation mains are being extended to Billesdon and Houghton at a cost of approximately £9,800.

*Blaby Rural District.*

Extensions have been laid to building estates at Braunstone, Enderby, Glenfield, Glen Parva, Lubbesthorpe, Narborough and the Cottage Homesteads, Cosby.

*Castle Donington Rural District.*

The district scheme is nearing completion and the villages of Lockington and Hemington were supplied under the scheme during October.

*Lutterworth Rural District.*

The scheme to augment the present supply in the Lutterworth parish is practically complete.

*Market Bosworth Rural District.*

A piped supply throughout the village of Higham-on-the-Hill has been completed and one is contemplated at Bagworth.

*Market Harborough Rural District.*

The parish of Lubenham has had water mains installed. Previously the Urban Council had supplied various private owners by agreement.

*Melton and Belvoir Rural District.*

Piped water supplies have been laid on to Burton Lazars and Thorpe Arnold.

## RAINFALL IN 1938.

I am indebted to Mr. Stacey, Surveyor to the Wigston Urban District, for the following table showing the rainfall month by month at the Wigston Urban District Council's Sewage Farm, Countesthorpe Road, Wigston.

Month	Total Depth	Greatest Fall in 24 hours	No. of days with 0.01 in. or more	No. of days with 0.04 in. or more
	Inches	Inches		
January ....	2.68	0.50	25	13
February ....	1.00	0.26	17	8
March ....	0.29	0.14	9	3
April ....	0.09	0.03	5	Nil
May ....	1.42	0.31	13	7
June ....	1.24	0.35	13	6
July ....	2.65	0.48	20	16
August ....	3.49	1.33	15	9
September ....	2.34	1.03	15	9
October ....	2.20	0.59	18	11
November ....	2.17	0.35	20	13
December ....	2.61	0.30	27	19
Total ....	22.18		197	114

During the first six months of the year a severe drought was experienced and the rainfall was 8.45 inches less than that for the same period in 1937. During the latter six months however, some improvement in the rainfall occurred but nevertheless the total rainfall for the year was 4.12 inches below that for the previous year.

The following table shows the yearly rainfall during the past 10 years :—

*Rainfall.*

Year	Inches
1929 ....	23.21
1930 ....	27.20
1931 ....	25.16
1932 ....	24.31
1933 ....	19.14
1934 ....	18.49
1935 ....	26.86
1936 ....	28.85
1937 ....	26.30
1938 ....	22.18

## DRAINAGE AND SEWERAGE.

The duties of the engineer or inspector in charge of a sewage farm become more numerous and more exacting as the years go by. While the aims of sewage treatment and purification have remained the same, they are much nearer attainment now than they were twenty years ago.

The object of sewage treatment and purification is to ensure that the sewage will not be a danger to health, create a nuisance or pollute rivers or streams, and will not cause damage or hardship to users of river water into which the sewage effluent is discharged.

This is the ideal at which those in charge of sewage farms and works have to aim and it is not unattainable but in endeavouring to reach it they need the full co-operation and support of the local authority which they serve.

It cannot be denied that much pollution is still being caused by storm-water, and the extent and effect of this pollution is becoming more widely appreciated. There appears to be a tendency to set overflows too low, following too closely the "six times dry weather requirement" instead of giving due regard to maximum flow. The Royal Commission recommended that overflows should be used sparingly and should usually be set so as not to come into operation until the flow is several times the maximum normal dry weather flow in the sewer.

When a local authority decides to apply for a loan in order to carry out sewerage and sewage extensions detailed plans are submitted before the inquiry takes place and this affords an opportunity for checking and rectifying such matters as unnecessary overflows, etc. When, however, the council undertake the scheme out of revenue, the work is often completed before the county authorities are aware that any alterations are even contemplated and this department is sometimes faced with the unpleasant task of drawing the attention of the local authority to some points which could easily have been rectified on the plan, but which may be very expensive to alter in the completed work.

The Public Health (Drainage of Trade Premises) Act, 1937 came into operation in July, 1938. In the interest of economy those in charge of works should be prepared to follow to their source discharges of trade waste which are being, to an increasing extent, received in public sewers.

Sewage works and farms are regularly inspected and I am pleased to report the happy co-operation which exists between those in charge of the

works and the County Sanitary Inspector whose duty it is to make the inspection.

During the year 79 samples of sewage effluents were brought to the laboratory for analysis.

The following important extensions or improvements were carried out during the year :—

*Ashby-de-la-Zouch Urban.*

The extension of the sewer in Willesley Lane has been completed.

*Coalville Urban.*

The whole of Thringstone has been sewered and this involved the laying of 1,959 lineal yards of sewer. An extension of 67 lineal yards has also been made in Ibstock Road, Ellistown.

*Hinckley Urban.*

Elmesthorpe Lane and the south portion of Station Road, Earl Shilton, were sewered and also Kingsfield Road, Barwell, the latter under the Private Street Works Act.

*Oadby Urban.*

The main sewer from Queen Street to Gorse Lane has been completed in Glen Road and the existing cesspools abolished.

A new surface water sewer 21 inches diameter has been laid in Leicester Road from Sandhurst Street to Granville Avenue.

*Wigston Urban.*

560 lineal yards of sewer extensions have been made to various housing estates.

*Ashby-de-la-Zouch Rural.*

A total of 613 lineal yards have been laid extending existing sewers in Ashby Road, Measham and Donisthorpe.

*Barrow-on-Soar Rural No. 1.*

The new disposal works at Mountsorrel, Anstey and Thurcaston have been completed. 400 yards of sewer extension at Cropston Road, Anstey, have been laid.



*Barrow-on-Soar Rural No. 2.*

The filter media of 2 filters at Sileby sewage works have been washed and replaced and adjoining land has been utilized for irrigation purposes.

The foul water sewer at Seagrave Road, Sileby, has been extended 114 yards.

*Blaby Rural.*

Extensions of sewers have been made to housing estates at Enderby, Cosby, Glen Parva, Glenfield and Lubbethorpe.

*Castle Donington Rural.*

The Hemington and Lockington sewerage scheme is now completed.

*Market Bosworth Rural.*

Two tanks on the septic principle have been installed in the villages of Nailstone and Barton in the Beans.

*Melton Mowbray Rural.*

The re-sewering of Asfordby Valley and Asfordby Village, and also part re-sewering of Waltham-on-the-Wolds Village, were completed and a total of 1,036 yards of new sewers were laid at Barkestone, Hoby, Rotherby and Stathern.

New sewage disposal works were constructed at Waltham-on-the-Wolds, Clawson and Burrough at a cost of £4,500 and the Asfordby sewage works were completed.

### **POLLUTION OF RIVERS AND STREAMS.**

The various rivers and streams in the county, especially the tributaries of the River Soar, have been inspected at regular intervals and samples of water taken for analysis from points at short distances above and below the outfalls of effluents from sewage farms.

During the year 222 samples were taken for the purpose of laboratory analysis in order to detect pollution.

Under the auspices of the Ministry of Agriculture and Fisheries, investigations of the River Soar were carried out in July and September as part of the annual hydrographical survey of the Trent watershed. Twenty-eight samples were collected and submitted to laboratory analysis, an estimate also being made of the dissolved oxygen content.

**GENERAL SANITATION.****CLOSET ACCOMMODATION.**

It is gratifying to note the large increase during the year in the conversion of privies and pail closets to the water carriage system, and it is to be hoped that as more efficient water supplies, sewerage and sewage disposal schemes become available over wider areas, this good work will continue apace.

The total number of conversions to water closets carried out during the year was 1,457, which is an increase on the previous year of 785 or over 100 per cent.

The abolition of privies wherever practicable is very desirable in the interests of public health and I am pleased to state that in 192 instances they have been replaced by pail closets.

At the end of the year there were approximately 63,600 water closets, 18,300 pail closets and 4,400 privies in the county.

**PUBLIC CLEANSING.**

With regard to the disposal of refuse improvement is still needed in a number of districts, particularly in respect of the condition in which refuse tips are maintained.

We are well aware that the standard of public cleansing appertaining in the majority of urban districts is not always practicable in large rural areas with scattered populations, but even so there is no necessity for back gardens and roadside ponds to become communal dumping grounds for ashes, refuse and the contents of pail closets and privies. These neglected tips are admirable breeding grounds for all kinds of vermin, particularly flies, crickets and rats, yet it has long been recognised that, with suitable precautions, refuse of all descriptions can be disposed of by tipping without giving rise to any nuisance and in many instances land of little or no value has been reclaimed and put to good use by the exercise of properly controlled refuse tipping. In these days of rapid transport it should be the aim of local authorities to limit to a minimum the number of places used for tipping refuse and to see that such tips are maintained in such a condition that no cause for complaint, *e.g.* fire, smell, unsightliness, etc., can arise.

The Ministry of Health have issued some suggested precautions on the care of refuse tips which would, if they were adopted by all sanitary

authorities, considerably increase the standard of efficiency of the tips, obviate all nuisance or danger to health and definitely improve the appearance of the country-side.

As this is a matter of interest to all engaged in public health I have taken the liberty of reproducing below these suggested precautions in the hope that they may be of assistance, particularly to those persons who are contemplating new or improved schemes of public cleansing :—

*Refuse Tips.—Suggested Precautions.*

1. Every person who forms a deposit of filth, dust, ashes or rubbish of such a nature as is likely to give rise to nuisance exceeding \* cubic yards must, in addition to the observance of any other requirements which are applicable, comply with the following rules :—

- (i.) The deposit to be made in layers.
- (ii.) No layer to exceed † feet in depth.
- (iii.) Each layer to be covered, on all surfaces exposed to the air, with at least nine inches of earth or other suitable substance ; provided that during the formation of any layer not more than \* square yards may be left uncovered at any one time.
- (iv.) No refuse to be left uncovered for more than 24 hours from the time of deposit. ‡
- (v.) Sufficient screens or other suitable apparatus to be provided, where necessary, to prevent any paper or other debris from being blown by the wind away from the place of deposit.

2. Every person who deposits any filth, dust, ashes or rubbish likely to cause a nuisance if deposited in any water must, so far as practicable, avoid its being deposited in water.

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\* Appropriate figures should be inserted here, after full consideration of the local conditions. The Ministry will be glad to advise on this point and, in any event, to be informed of the figures adopted.

† Unless the circumstances are very exceptional, the depth of the layer should not exceed six feet.

‡ The object of this is to provide that even the surface which is allowed to remain exposed under the proviso to (iii) shall be covered up promptly ; this should be done within 24 hours.

3. Every person who deposits any filth, dust, ashes or rubbish must take all reasonable precautions to prevent the breaking out of fires and the breeding of flies and vermin on or in such deposit.

4. If the material deposited at any one time consists entirely or mainly of fish, animal or other organic refuse, the person making such deposit must forthwith cover it with earth or other equally suitable substance at least two feet in depth.

5. Every person who deposits any filth, dust, ashes or rubbish must take all practicable steps to secure that tins or other vessels or loose debris likely to give rise to nuisance are not deposited in an exposed condition on or about the place of deposit.

6. Sufficient and competent labour must be provided in connection with the deposit to enable the necessary measures to be taken for the prevention of nuisance.

7. So far as practicable each layer of refuse which has been laid and covered with soil must be allowed to settle before the next layer is added.

8. Wherever practicable the person making the deposit must avoid raising the surface of the tip above the general level of the adjoining ground.

9. All refuse must be disposed of with such dispatch and be so protected during transit as to avoid risk of nuisance.

In this county the standard of public cleansing is definitely on the up-grade and the following are the chief improvements effected during the year or contemplated in the near future :—

#### *Ashby-de-la-Zouch U.D.*

Four ashpits have been abolished and 14 ashbins provided in lieu thereof. Fifty-four new ashbins were provided in place of unsuitable or ineffective receptacles.

#### *Ashby Woulds U.D.*

Eleven ashpits have been abolished and 19 galvanised iron bins have been provided.

*Coalville U.D.*

One hundred and fifty-one dry ashpits have been abolished and dustbins substituted in lieu thereof. The collection of trade refuse has been re-organised to meet the provisions of Sec. 73 of the Public Health Act, 1936.

*Hinckley U.D.*

All the house refuse from Barwell and Earl Shilton is now taken to the Earl Shilton tip which has obviated the use of land adjoining the Stapleton Lane, Barwell sewage disposal works as a tip.

*Market Harborough U.D.*

One ashpit was abolished and a dustbin substituted. 246 new dustbins were provided to replace those worn out.

*Ashby-de-la-Zouch R.D.*

The Council's direct scavenging scheme for the parishes of Measham, Oakthorpe and Donisthorpe, Heather, Ravenstone, Swannington, Coleorton, Worthington, Osgathorpe and Snarestone, came into operation on April 1st, 1938,

*Barrow-on-Soar R.D. No. 1.*

Collection of house refuse has been extended to include the more rural parishes and now covers the whole district. 3 ashpits were abolished.

*Barrow-on-Soar R.D. No. 2.*

The parishes of Beeby, Wanlip and Ratcliffe, were included in the scheme for the collection of dry house refuse only as from April 1st, 1938. During the year the parishes of Queniborough, Rearsby, South Croxton, Birstall, Sileby (part of) and Thrussington, which were originally scavenged by contract, were included in the centralised scheme by direct labour for dry refuse only as from April 1st, 1938. The nightsoil from these parishes continues to be collected by contract with the exception of Sileby, which is by direct labour at present.

*Billesdon R.D.*

The parish of Tilton was added to the scheme for collection by direct labour on April 1st, 1938.

*Blaby R.D.*

There have been extensions of the Council's direct scheme to Cosby Cottage Homesteads and the developing areas.



*Lutterworth R.D.*

A scheme for centralising the scavenging has been prepared but the Council has decided to let the matter stand over for a further twelve months.

*Market Bosworth R.D.*

The new system of centralised collection came into operation on October 1st, 1938 and a weekly service is given to the whole of the district, 3,000 dustbins and 3,480 pail closets being emptied each week with disposal at 5 central tips. 74 privies covering 225 houses and 116 ash pits serving 380 houses have been abolished within three months.

Earth closets, privies and ash pits are cleansed by the Council once more only on the conditions that conversions to pan-closets are carried out and a separate dustbin for each house is provided.

*Market Harborough R.D.*

All ash pits have been abolished and regulation dustbins provided throughout the area.

*Melton and Belvoir R.D.*

The weekly collection of household refuse was extended to cover sixteen additional villages and eighteen additional villages were included for nightsoil collection.

## SANITARY INSPECTION OF THE AREA.

The following table gives the details of the sanitary inspection of the county during the year 1938:—

DISTRICT	No. Com-plaints received	No. Defects or nuisances discovered	No. Premises Visited		No. of Notices served				Summary action	
			Inspection	Re-visits	Preliminary		Statutory		Sum-mones issued	Convic-tions obtained
					Housing	Other	Housing	Other		
MUNICIPAL BOROUGH Loughborough ...	55	4,217	6,991	16,353	196	115	6	11	1	1
URBAN DISTRICTS										
Ashby-de-la-Zouch	26	385	590	285	154	126	48	36	—	—
Ashby Wolds ...	212	467	791	—	19	325	—	—	—	—
Coalville ...	126	472	2,125	477	169	218	9	128	1	1
Hinckley ...	114	685	2,716	2,857	11	685	89	—	1	—
Market Harborough	117	796	1,153	2,121	93	371	6	1	—	—
Melton Mowbray ...	71	112	373	662	39	20	2	—	—	—
Oadby ...	18	92	779	—	22	71	1	1	—	—
Shepshed ...	19	81	675	202	50	19	5	—	—	—
Wigston ...	85	248	567	2,410	197	48	36	—	—	—
RURAL DISTRICTS										
Ashby-de-la-Zouch	196	677	1,260	645	438	59	80	1	—	—
Barrow-on-Soar,										
No. 1 ...	104	223	1,769	2,006	73	98	29	15	—	—
No. 2 ...	120	147	1,647	1,350	23	54	—	—	1	1
Billesdon ...	184	—	1,006	—	28	19	—	14	—	—
Blaby ...	37	353	3,854	1,263	223	130	3	2	—	—
Castle Donington ...	38	22	520	1,077	—	236	—	19	1	1
Lutterworth ...	77	143	772	230	45	109	—	—	—	—
Market Bosworth	184	107	1,828	192	—	—	—	—	—	—
Market Harborough	128	253	1,825	2,218	17	177	24	3	—	—
Melton & Belvoir...	25	1,766	3,314	2,193	36	247	24	8	—	—
TOTALS	1,936	11,246	34,555	36,541	1,833	3,127	362	239	5	4

## SHOPS.

It is the duty of local authorities to enforce the provisions of the Shops Act, 1934, which requires that every part of a shop in which persons are employed shall be suitably ventilated and maintained at a reasonable temperature, and that suitable and sufficient sanitary conveniences shall be provided and maintained for the use of employees.

During the year 143 defects were found, 106 relating to sanitary conveniences, 16 to temperature and 21 to ventilation. Seventy-one contraventions of the Act were outstanding from the previous year and a total of 169 contraventions were remedied during the year.

The action entailed by the above was carried out in Loughborough and the following districts:—

*Urban.*

Ashby-de-la-Zouch  
Coalville  
Hinckley  
Market Harborough  
Melton Mowbray  
Wigston

*Rural.*

Barrow-on-Soar No. 1.  
Blaby  
Lutterworth  
Market Bosworth

## SMOKE ABATEMENT.

This is a subject which presents peculiar difficulties, the public usually accepting smoke as a part of the landscape and unless they, themselves, are inconvenienced never giving a thought to the damage caused by this evil. Much has been done and is being done, towards the purifying of the atmosphere in most districts.

Smoke can be reduced if proper methods of stoking, efficient regulation of air supply to the furnaces, a good class of fuel and efficient supervision on the part of stokers or engineers in charge of plants, are adopted, and improvements can be effected with a minimum of expenditure, with economical results.

Throughout the county there is great variation in the standard of smoke emission, some authorities having adopted a four minute period, others a six minute period in the hour, while others have no definite standard.

A standard of smoke emission should be adopted, a fair one being three minutes of dense smoke in the aggregate during a continuous period of thirty minutes and any emission in excess of that limit should be deemed to be a nuisance.

Legislation provides power for dealing with nuisances arising from "industrial" smoke but unfortunately there is no redress against the co-offender "domestic" smoke and the evil will exist until more use is made of smokeless fuels.

It is pleasing to note that there is co-operation between local authorities and industry with a view to reducing smoke nuisances.

The following table gives the number of smoke observations made during the year :—

District	No. of Factory or works chimneys	No. of smoke observations made	No. of cases in which action was necessary
MUNICIPAL BOROUGH Loughborough ....	41	17	—
URBAN DISTRICTS.			
Ashby-de-la-Zouch ....	2	4	2
Ashby Woulds ....	52	—	—
Coalville ....	41	—	—
Hinckley ....	201	113	9
Market Harborough ....	20	19	3
Melton Mowbray ....	14	10	2
Oadby ....	—	—	—
Shepshed ....	15	3	—
Wigston ....	25	52	16
RURAL DISTRICTS.			
Ashby-de-la-Zouch ....	12	—	—
Barrow-on-Soar No. 1. ....	37	30	10
"    "    "    No. 2. ....	32	18	—
Billesdon ....	—	—	—
Blaby ....	35	16	2
Castle Donington ....	—	—	—
Lutterworth ....	17	5	2
Market Bosworth ....	—	—	—
Market Harborough ....	5	1	1
Melton and Belvoir ....	23	8	—
Totals ....	572	296	47

## SWIMMING BATHS AND POOLS.

A fit nation can only be assured if proper equipment and facilities for obtaining fitness are available to the general public at a price which they can afford.

Among the facilities which are needed are stadiums for organised sport, running and cycling tracks and last, but by no means least, swimming baths and pools.

For any exercise to be of value in increasing physical fitness it is necessary for that exercise to be undertaken regularly and not at spasmodic intervals as fortune allows. Unfortunately facilities for swimming are very meagre except in populous areas where private enterprise has stepped in or where there is a progressive and modern local authority in power.

Only the fortunate few can afford to attend regularly at privately owned swimming pools owing to the high charges for admission and it is my considered opinion that all local authorities should provide adequate facilities for swimming for the inhabitants of their area.

In this county there are 16 swimming baths and pools and two paddling pools. Nine pools are privately owned, and three of these are reserved for private use only. Of the 13 pools available to the general public, 12 are situated in urban areas. This for a population of 302,600 is not a very satisfactory state of affairs. The urban swimming and paddling pools were inspected on 222 occasions during the year.

Several of the publicly owned baths have modern filtration plants installed, while in the others the water is chlorinated or, at least, changed very frequently.

## CAMPING SITES.

The number of sites in the county used for camping purposes during 1938 was 24 of which 19 were in rural areas and 5 in urban districts. Of the 17 camping sites in respect of which licences have been issued by the local authorities under Section 269 of the Public Health Act, 1936, 14 were in rural districts.

## ERADICATION OF BED BUGS.

It appears that 27 council houses and 79 other houses were found to be infested with bed bugs. Disinfestation was undertaken in respect of these 106 houses—97 by the local authority and 9 by contract. In all cases disinfestation was followed by periodical inspection.



**SCHOOLS.****SANITARY CONDITIONS, AND ACTION TAKEN FOR THE  
PREVENTION OF INFECTIOUS DISEASE.**

A survey of the hygienic condition of the elementary schools in the county was again carried out during the year, this being the seventh year during which the scheme has been in operation. At the time of the routine medical inspections, the medical officers take the opportunity of discussing with the headteacher any matters relating to the school building and also make a general survey of the school premises with particular attention to the out-offices, etc. A special report is made upon every school visited during the year.

This system has been of great benefit in bringing to the notice of the appropriate department instances of disrepair and delapidation in the early stages. It is obviously helpful to all concerned that any complaint from the teacher should have the backing of a disinterested third party ; it promotes the remedying of serious defects, and prevents the department being hindered by the investigation of petty complaints.

All reports are examined by the senior assistant school medical officer before any defects are referred to the Building and Sites Department. Defects of a trivial nature are held over either on account of their triviality or because it is known that the provision of new school premises is being considered.

The following repairs and improvements were carried out during the year :—

Playgrounds tar-paved and repaired	....	....	6
Installation of water supply	....	....	7
Electric light installations	....	....	5
Conversion of out-offices to water carriage system			4
Folding partitions in class rooms	....	....	6
Heating improvements	....	....	3

With regard to the prevention of infectious disease, it was necessary during 1938 to close five schools for periods of 14 to 15 "school" days on account of measles and scarlet fever. In one particular school it was necessary to exclude two classes of children for 10 days owing to an outbreak of diphtheria.

In addition to the ordinary precautionary measures for the control of infectious disease, active immunisation against diphtheria was carried out in two districts where the disease was prevalent.

## HOUSING.

The County Council have very definite responsibilities and powers in connection with rural housing. Section 88 (1) of the Housing Act, 1936 states "It shall be the duty of the council of every county, as respects each rural district within the county, to have constant regard to the housing conditions of persons of the working classes, the extent to which overcrowding or other unsatisfactory housing conditions exist and the sufficiency of the steps which the council of the district have taken, or are proposing to take, to remedy those conditions and to provide further housing accommodation."

Further, the County Council is empowered to make contributions in aid of houses provided for the agricultural worker and if as in this county, the administration of the Housing (Rural Workers) Acts is undertaken by the County Council, a very definite contact with and interest in the housing activities of each of the rural authorities is necessary if the best results are to be obtained.

In the past the normal supervision exercised has been in the form of returns of housing but this should be supplemented by actual inspection of the housing conditions in the various rural districts.

To-day the re-housing of the rural working classes, at a rental they can afford to pay, has been made possible for rural authorities and there is no reason why the rural cottage should not conform to a decent standard of sanitation. Unfortunately there are many of these houses still without proper food storage, drainage or sinks, etc.

The County Sanitary Inspector was instructed to make a survey of certain houses in one of the rural districts and the experience of this survey caused him to consider the advisability of introducing a standard of housing throughout the county. He prepared a suggested standard, each district sanitary inspector was furnished with details, and a meeting was called to discuss the matter at which it became obvious that the desire for a reliable standard was unanimous and many useful suggestions were made. The County Public Health and Housing Committee then appointed a Sub-Committee to consider and report on the matter and after several meetings the suggestions were agreed upon by all parties and the Committee decided to circulate the following standard.

“HOUSING ACTS.”

*Standard of Fitness Respecting Existing Dwellings.*

“Fit for human habitation” implies generally that a dwelling should be free from serious dampness, satisfactorily lighted and ventilated, properly drained and provided with adequate sanitary conveniences and with a sink and suitable arrangements for disposing of slop water, and be in good general repair.

Moreover, the dwelling should have a satisfactory water supply, adequate washing accommodation, facilities for preparing and cooking food and a well ventilated food store.

In the administration of the Housing Acts common sense must be applied and the standards must, of necessity, be interpreted with elasticity as occasion warrants.

The following standards are suggested as a guide to those undertaking repairs and alterations to dwelling houses.

*Roofs.*

All roofs to be made thoroughly sound and weather proof. Where necessary the roof to be stripped and recovered.

*Guttering.*

All roofs must have eaves-guttering and downpipes in good order. Downpipes must be connected to rainwater tanks, or approved soakaways or drains so as to prevent dampness of dwelling.

*Chimneys.*

Chimney stacks to be repaired or rebuilt and made thoroughly sound ; defective pots to be replaced.

*Walls.*

Walls to be repaired, made sound and weatherproof ; perished joints to be raked out and re-pointed.

*Dampness.*

General dampness of walls and floors to be remedied by appropriate measures. An approved damp-proof course to be provided to all walls where necessary at or above the ground level.

*Ventilation.*

Every house to have adequate through ventilation. Provide every habitable room with permanent means of ventilation.

*Plaster (Walls and Ceilings).*

All defective plaster on walls and ceilings to be hacked off and the surface re-plastered or covered with composition board and left in a sound condition.

*Floors.*

All floors where defective to be repaired or relaid.

*Windows.*

Provide every habitable room of the house with a window or windows as near the top of the room as practicable. The total area of the window space should be equal to at least one-tenth of the floor area of the room and should be capable of being opened directly into the external air to at least one-half of the total area. Broken panes to be replaced where woodwork is defective and, where necessary, sashes to be renewed and proper window sills provided.

*Staircase.*

Provide and maintain adequate means of lighting and ventilation for every passage or staircase wherever practicable. Staircases to be thoroughly repaired where necessary. Provide and fix a proper handrail to each staircase.

*Woodwork.*

All defective woodwork, such as doors, window frames, and casings, skirtings, balustrades, etc., to be repaired or renewed and made thoroughly sound.

*Foodstore.*

Provide adequate accommodation for the storage of food in a reasonably cool position, with light and ventilation from the external air and with protection from dust and flies.

*Cooking Facilities and Firegrates.*

Every house to be provided with suitable and adequate provision for cooking food. The firegrates to be sound.

*Water Supply.*

Every house to have a proper and sufficient water supply. If it is possible to connect to a water main then an internal water supply and tap shall be fixed over the sink of each house.

*Sink.*

Provide and fix a suitable sanitary glazed sink with a proper and sufficient waste pipe to discharge over a trapped stoneware gully properly connected to an approved drain.

*Paving.*

All defective paving to be repaired or relaid where necessary and suitably drained. All approaches to house doors, closets and wash-house to be suitably paved.

*Closet Accommodation.*

Provide separate closet accommodation for each house. Closets to be maintained in good condition and repair, properly lighted and ventilated to the external air.

*Water Closets.*

The water closet to be in thorough repair, the flushing cistern in good order, the woodwork and the basin sound; long hopper and other unsatisfactory types of basin not to be used.

*Drains and Gullies.*

Drains to be made thoroughly sound, connected to the sewer or properly constructed cesspool and ventilated; inspection chambers and approved gullies to be provided where necessary.

*Ashes Accommodation.*

A sufficient and suitable galvanised iron receptacle with proper lid to be provided for household refuse at each house.

*Painting.*

All old paint on outside woodwork of the building to be removed, if required, and to be repainted three coats if necessary.

In all cases where reconstruction of houses has been undertaken and the internal paint work and papering has been interfered with the whole



**SUMMARY OF THE ORDINARY HOUSING ACTIVITIES IN THE VARIOUS DISTRICTS IN THE COUNTY DURING 1938 :—**

DISTRICT	INSPECTION OF DWELLING HOUSES DURING YEAR				No. of Defective Dwelling Houses rendered fit in consequence of informal action by the Local Authority or their Officers	ACTION UNDER STATUTORY POWERS DURING YEAR							HOUSING ACT, 1936, PART IV.—OVERCROWDING					
	Total No. of Dwelling Houses inspected for Housing defects (under Public Health or Housing Acts)	No. Dwelling Houses inspected and recorded under the Housing (Consolidated) Regulations 1925 & 1932 (included in previous column)	No. Dwelling Houses found to be in a state so Dangerous or Injurious to Health as to be unfit for Human Habitation	No. Dwelling Houses found not to be in all respects reasonably fit for Human Habitation (exclusive of those in previous column)		HOUSING ACT, 1936, SECTIONS 9, 10 & 16		PUBLIC HEALTH ACTS		HOUSING ACT, 1936, SECTIONS 11 & 13		HOUSING ACT 1936, SEC. 12	No. Dwelling Houses over-crowded at end of year	No. Families Dwelling therein	★ No. Persons Dwelling therein	No. New Cases of Overcrowding reported during year	No. Cases of Overcrowding relieved during year	★ No. Persons Concerned in such cases
						No. Dwelling Houses in respect of which Notices were served requiring repairs	No. Dwelling Houses rendered fit after service of Formal Notices (By Owners)	No. Dwelling Houses in respect of which Notices were served requiring Defects to be remedied	No. Dwelling Houses in which Defects were remedied after service of Formal Notices (By Owners)	No. Dwelling Houses in respect of which Demolition Orders were made	No. Dwelling Houses Demolished in pursuance of Demolition Orders	No. Separate Tenements or Underground Rooms in respect of which Closing Orders were made						
MUNICIPAL BOROUGH Loughborough ....	886	275	62	357	240	11	11	31	31	59	—	—	55	56	473	33	40	393
URBAN DISTRICTS....																		
Ashby-de-la-Zouch	159	34	2	51	8	45	39	14	12	1	—	—	3	3	20	1	28	200
Ashby Woulds ....	378	14	—	16	408	—	—	—	—	—	—	—	28	30	195	—	1	7
Coalville ....	197	39	9	30	166	9	11	9	1	16	11	—	65	76	490	18	94	784
Hinckley ....	411	171	146	25	85	—	—	—	—	8	18	—	26	26	225	1	9	49
Market Harborough	202	9	9	71	61	—	—	—	—	—	4	—	1	1	11	4	8	59
Melton Mowbray ....	221	23	6	17	24	—	—	—	6	2	13	—	17	19	139	—	16	112
Oadby ....	95	2	—	29	20	1	—	—	—	—	—	—	4	4	35	—	—	—
Shepshed ....	97	42	15	27	16	5	3	—	—	8	8	—	2	2	12½	—	1	8
Wigston ....	362	94	36	186	59	—	—	—	—	5	—	—	4	4	36	2	18	164
RURAL DISTRICTS																		
Ashby-de-la-Zouch	964	82	13	882	441	13	—	1	—	9	—	—	34	34	213	—	100	634
Barrow-on-Soar No. 1	460	65	41	170	183	4	4	2	—	23	21	—	14	14	73	—	2	15
Barrow-on-Soar No. 2	253	62	48	70	63	3	12	11	20	34	29	1	34	37	253½	—	18	105½
Billesdon ....	50	50	10	40	28	16	4	1	—	10	—	—	2	2	11	—	—	—
Blaby ....	1894	511	29	67	373	6	6	—	—	8	1	—	24	24	127	1	11	74
Castle Donington ....	20	20	17	3	20	14	6	—	—	5	18	—	4	4	20	—	10	57
Lutterworth ....	94	45	24	21	21	—	—	—	—	24	15	—	2	2	15	3	17	105
Market Bosworth	488	38	—	158	60	—	—	—	—	—	—	—	54	54	432	5	7	56
Market Harborough	523	139	42	254	171	24	2	3	3	6	15	—	2	2	24	3	5	39
Melton & Belvoir ....	62	62	2	60	42	24	44	—	—	2	20	—	34	41	222	—	4	38
TOTALS ....	7816	1777	511	2534	2489	175	142	72	73	220	173	1	409	435	3027	71	389	2899½

★ NOTE—In determining the number of persons sleeping in a house, Section 58 Housing Act, 1931, states that a child who has attained one year and is under ten years old, shall be reckoned as one-half of a unit.



of such paintwork shall be made good, the walls re-papered or colour washed and the ceilings whitened. All old paper to be removed before re-papering.

*Clothes Washing Accommodation.*

Every house shall be provided with sufficient accommodation for the washing of clothes.

*Outbuildings.*

All outbuildings to be put in a satisfactory state of repair.

*Coals.*

Separate and sufficient store for coals to be provided.

This is now the standard for all the houses in the county which are of a type suitable for occupation by the working classes, and if more inspections under the Housing (Consolidated) Regulations were done and appropriate action methodically carried through it should eventually result in all such houses being gradually raised to this standard.

I would like to take this opportunity of placing on record my appreciation of the co-operation received from my Committee, and also the district sanitary inspectors, in the preparation of this publication.

It would appear from the local health reports that housing problems have again been among the principal subjects engaging the attention of local authorities during 1938 and that there is a general desire on the part of district councils to remedy bad housing conditions will be seen from the following statistics. It will be observed that during the year 71 new cases of overcrowding were discovered and 389 cases were relieved.

The accompanying table summarises the ordinary housing activities in the various districts in the county during 1938.

# INSPECTION & SUPERVISION OF FOOD.

## MILK SUPPLIES.

### THE MILK (SPECIAL DESIGNATIONS) ORDERS 1936 & 1938.

A large amount of the time of the County Sanitary Inspector and his staff has been taken up in connection with the above orders and although the number of applications for licences is decreasing the time taken up by visits and revisits to premises of applicants for licences is still very considerable. More time, in the future, will be devoted to duties in connection with the inspection of such licensed premises and investigations regarding unsatisfactory samples.

#### *"Tuberculin Tested."*

On December 31st, 1938 there were 23 farms licensed to produce "Tuberculin Tested" milk, 4 of these holding in addition certificates of "Attestation" issued by the Ministry of Agriculture and Fisheries. During the year 7 new licences were issued and one licence was relinquished as the farmer was leaving the district.

#### *"Accredited Milk."*

Although there has been a decrease in the number of producers making application for an "Accredited" licence there are still many who are realising the benefits to be gained by producing milk of this standard, and during the year 78 new licences were issued as against 100 last year. Five licences were relinquished by producers holding "Tuberculin Tested" licences, 3 licences were not renewed on January 1st, 1938, 14 farmers either sold or left their farms during the year and in one case the farmer died. This left a total of 525 producers on the register on December 31st, 1938.

During the year 95 farmers asked for particulars of the "Accredited" scheme. Each farm has been visited in co-operation with the local sanitary inspector and in cases where alterations were necessary the applicant has been notified in writing, a copy of the letter being sent to the local sanitary inspector. Fifty farmers made definite application for a licence and, as previously stated, 78 new licences were granted, many of these having been applied for during the latter part of the previous year.

After various unsatisfactory reports had been received the licence of one producer was suspended during the year. This producer appealed to the Ministry of Health against the County Council's decision, but the Ministry dismissed the appeal and confirmed the action of the County Council.

The following table shows the number of licences issued under the Orders and in operation at the end of the year :—







During the year the district sanitary inspectors made 3,243 inspections of farm premises and 1,252 inspections of dairy premises other than where cows are kept. The total number of contraventions outstanding from the previous year was 45, the number found during the year 997 and the number remedied 865.

The officers of the County Council paid 1,758 visits to farms and were accompanied on many of these visits by the district sanitary inspector.

The local officials have again rendered valuable service to the cause of "clean milk" production by taking "surprise" samples of milk both at the farm and in course of delivery to the consumer. The number of these samples submitted to the county laboratory for bacteriological examination was 806 of which 25 were pasteurised. Should any sample prove unsatisfactory the producer concerned is advised by the local sanitary inspector as to the steps necessary to remedy the trouble. In addition officers of the County Council have taken 1,190 "surprise" samples of "designated" milk at the farms and the results of the bacteriological examination of a further 2,916 samples of "designated" milk have been obtained from various other sources.

The accompanying graph shows the percentage of satisfactory and unsatisfactory samples of "Tuberculin Tested" and "Accredited" milk which were examined at the county laboratory during the year.

The months of June, July, August and September show a decided decline in the number of samples which complied with the standards laid down in the Milk (Special Designations) Order, 1936 and while this decline may be attributed in some instances to the warmer weather experienced at this period I do not think that we should lose sight of the fact that at this time of the year haymaking and harvesting are in full swing and some producers allow clean milk production to suffer in consequence.

This provides excellent evidence of the need for regular supervision by local authorities to ensure that the bacteriological cleanliness of milk supplies is constantly maintained.

It is well known that there are producers who maintain a very high standard of cleanliness regardless of weather conditions or other extraneous influences and it should be the duty of all engaged in public health to make a combined effort on this front. We must not relax our efforts until we have eliminated that alarming dip in the "percentage satisfactory" line.

**SAMPLES OF "DESIGNATED" MILK  
EXAMINED AT THE  
COUNTY LABORATORY,  
YEAR 1938.**

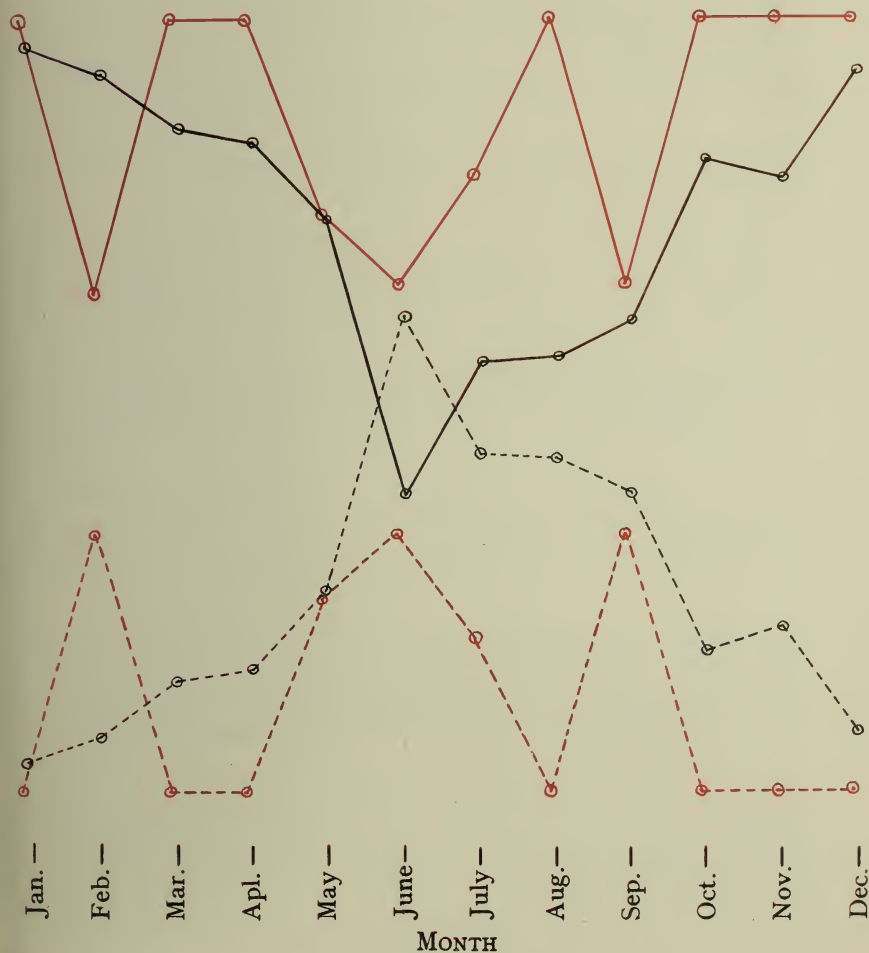
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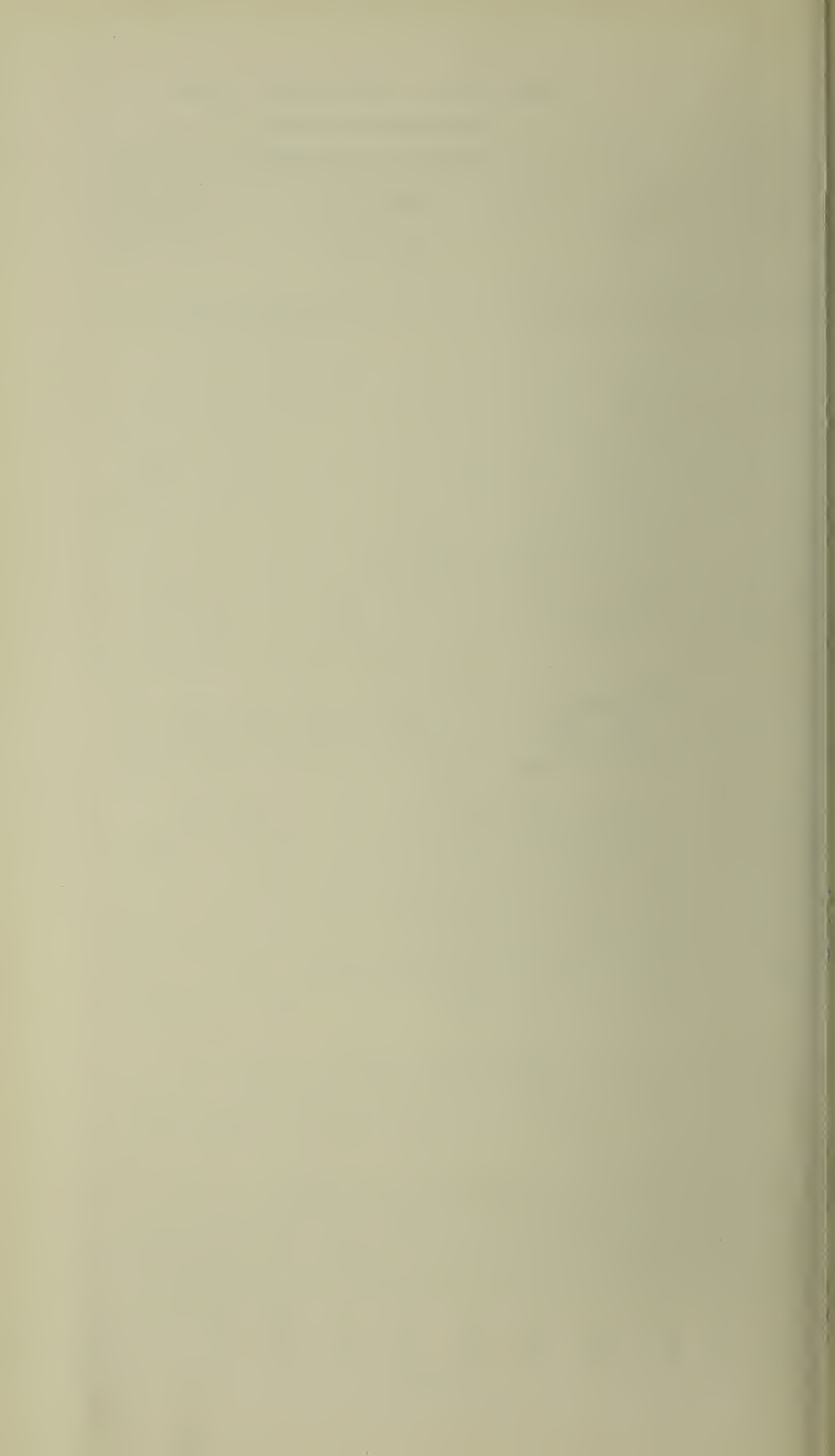
**"TUBERCULIN TESTED"**

% satisfactory .....  
% unsatisfactory .....

**"ACCREDITED"**

% satisfactory .....  
% unsatisfactory .....





## MILK AND DAIRIES (CONSOLIDATION) ACT, 1915 SECTION 4.

When reports are received from other local authorities regarding the presence of tubercle bacilli in milk produced in the county investigations are made, and until 31st March, 1938 these were carried out by the veterinary department under the control of the County Veterinary Officer. Since that date the investigations have been made by officers of the State veterinary service connected with the Ministry of Agriculture and Fisheries.

During the year 32 reports were received :—Birmingham C.B.C. 15 ; Coalville U.D.C. 6 ; Leicester C.B.C. 4 ; Long Eaton U.D.C. 3 ; Nottingham C.B.C. 2 ; Warwickshire C.C. 1 ; London C.C. 1.

These reports necessitated the examination of 663 milking and 94 dry cows contained in the suspected herds and it was found necessary to make subsequent examinations of 157 milking and 20 dry cows.

Samples of milk totalling 196 and 4 samples of sputa were taken and examined microscopically by the veterinary officers, 18 of the milk samples and 3 sputa being positive. The remaining milk samples were forwarded to Cambridge University for biological tests.

The reports on the clinical examinations of the suspected herds were :—

Tuberculosis found on first inspection	....	....	....	15
Tuberculosis found on subsequent inspection	....	....	....	8
No. of cows affected with tuberculosis	....	....	....	33

In 9 herds no signs of tuberculosis could be found on clinical examination. Control samples of milk taken from all the cows proved to be negative on being biologically tested.

## SUPPLY OF MILK TO ELEMENTARY SCHOOL CHILDREN.

The supply of milk to the children attending secondary and elementary schools in the county has been continued.

These arrangements are made by the Agricultural Committee, the contracts being subject to the approval of the school medical officer. The producer must comply with the requirements at present in force in the county for the production and distribution of "accredited" milk.

Samples are collected at regular intervals from each supplier and examined bacteriologically at the county laboratory, the producer being warned in each case where the sample of milk does not conform to the

standard required by the Committee. Every effort is made to assist the farmer to produce a satisfactory milk as regards cleanliness and the services of the county sanitary inspectors are always available in an advisory capacity. If, however, after repeated warnings no improvement is forthcoming the contract is terminated; this was done on several occasions.

With the exception of samples taken from pasteurised supplies all milk is examined by the methylene blue test and also by the coliform test.

The number of samples collected was 400 and the results of the examinations were as follows :—

Satisfactory on both tests ....	....	....	344	(86%)
Not satisfactory on both tests ....	....	....	12	(3%)
Not satisfactory on methylene blue test ....	....	....	24	(6%)
Not satisfactory on coliform test ....	....	....	20	(5%)

In addition a further 140 samples of pasteurised milk were collected and examined and all proved to be satisfactory.

The milk supply is either pasteurised or of accredited standard. The majority of the latter is obtained from licensed producers and it is only in areas where difficulty is experienced in obtaining supplies that milk is obtained from unlicensed producers. The amount of pasteurised milk has again slightly increased during the year.

Some difficulty is still encountered in obtaining supplies of milk for children in the more rural schools but this is being overcome as far as possible by transporting milk from other areas.

Although it was decided last year to supply loose milk to children attending small schools, this was not encouraged and at the present time all supplies are bottled.

The following figures show the amount of milk supplied to schools during the past six years :—

	1933	1934	1935	1936	1937	1938
No. of schools receiving milk ....	179	201	209	211	237	238
No. of children receiving milk ....	6,600	18,503	14,058	13,672	15,169	16,450
No. of bottles supplied weekly ....	33,250	90,261	68,927	67,927	84,183	85,425
No. of gallons supplied weekly ....	1,385	3,761	2,873	2,829	3,507	3,559



It will be noticed that the number of children taking milk has again increased but this is partly due to the fact that 1,424 children are receiving free milk this year as compared with 994 last year. These children are all examined by the medical officers and certified as requiring extra nourishment before a free ration is sanctioned.

In special cases where malnutrition is in evidence the children are supplied with an extra ration of milk on the recommendation of a medical officer, the children receiving one bottle of milk during the morning break and one in the afternoon. The number of children receiving this extra supply during the year was 51.

As was mentioned last year it has not been possible to re-examine all these children during the year but it is hoped that this will be possible during 1939. Head teachers are being requested to bring forward all children having this free supply at the next visit of a medical officer.

#### MEAT AND OTHER FOODS.

The unsound or diseased meat condemned and destroyed by the local sanitary inspectors during 1938 was as follows :—

Area.		Whole Carcases			Part Carcases		
		Tuber- cular	Other than Tuber- cular	Total	Tuber- cular	Other than Tuber- cular	Total
Municipal Borough	....	1	2	3	269	38	307
Urban Districts	....	15	23	38	636	682	1318
Rural Districts	....	30	21	51	537	542	1079
Total	....	46	46	92	1442	1262	2704

*Slaughter Houses.*

There are 272 slaughter houses in the county, 158 being registered and 114 licensed. There is also one public abattoir. The following table shows the situation of the slaughter houses and the number of inspections made :—

DISTRICT	No. of Slaughter Houses	No. of Inspections at time of Slaughter	Total No. of Inspections	No. of Knackers' Yards	No. of Inspections
MUNICIPAL BOROUGH Loughborough ....	13	2,908	2,982	1	31
URBAN DISTRICTS					
Ashby-de-la-Zouch	6	48	78	2	12
Ashby Woulds ....	3	172	208	—	—
Coalville ....	17	935	1,038	—	—
Hinckley ....	17	1,931	2,006	—	—
Market Harborough	6	496	713	—	—
Melton Mowbray ....	4	372	384	1	10
Oadby ....	3	63	73	—	—
Shepshed ....	6	377	397	—	—
Wigston ....	10	1,104	1,152	1	36
RURAL DISTRICTS					
Ashby-de-la-Zouch	23	62	151	1	4
Barrow-on-Soar, No. 1 ....	20	414	426	1	14
No. 2 ....	8	360	381	1	32
Billesdon ....	11	30	47	—	—
Blaby ....	22	53	225	—	—
Castle Donington....	13	1,025	1,075	1	24
Lutterworth ....	21	361	384	2	18
Market Bosworth....	22	307	364	—	—
Market Harborough	17	500	745	—	—
Melton & Belvoir....	30	389	872	3	12
TOTALS ....	272	11,907	13,701	14	193

During the year 11,907 inspections of meat were made at the time of slaughter and 1,794 other visits were also made. The number of carcasses examined on these occasions was 62,420.

*Knacker's Yards.*

There are 14 knacker's yards in the county which were inspected during the year on 193 occasions.

*Meat Stalls, Shops, etc.*

Inspections of stalls where meat is exposed for sale totalled 777, meat shops and stores were inspected on 2,484 occasions and premises used for the sale of food other than meat on 751 occasions.

## ADULTERATION OF FOOD AND DRUGS.

In my previous reports I have drawn attention to the real need for unified control and supervision of milk production, not only to secure a rational co-ordination of administration but also to relieve the producer from an embarrassing number of advisers, each with a separate objective and some, possibly, with conflicting policies.

Authorities who neglect to enforce a reasonable structural standard in the cowshed nullify the endeavours of those whose aim it is to secure healthy cows, and those districts which fail to promote cleanliness of cowsheds, and care in production, hamper any efforts to obtain a clean milk supply.

Those who inform a producer that his milk is good because it is of satisfactory chemical standard may obstruct another officer who knows that such milk may be unsatisfactory and even badly contaminated from a bacteriological standpoint.

The protection of the public from fraud and the substitution of inferior commodities calls for constant vigilance on the part of those who administer the various Acts.

A new Act known as The Food and Drugs Act, 1938, will come into operation on the 1st day of October, 1939, and the time is now opportune for local authorities to reconsider the methods of administration. This Act consolidates, with amendments, certain enactments relating to food, drugs, markets, slaughterhouses and knacker's yards.

In this county the police are responsible for the administration of the Food and Drugs (Adulteration) Act, 1928 and the following information relates thereto :—

## FOOD AND DRUGS (ADULTERATION) ACT, 1928.

Samples taken for analysis during the year 1938.

Milk	....	....	....	169	Lard	....	....	....	6
Margarine	....	....	....	24	Tinned Soup	....	....	....	6
Potted Meat	....	....	....	13	Dried Sage	....	....	....	6
Cocoa	....	....	....	12	Castor Oil	....	....	....	6
Camphorated Oil	....	....	....	12	Tapioca	....	....	....	4
Coffee	....	....	....	12	Sausages, preserved	....	....	....	3

Pearl Barley	....	....	12	Granulated Gravy and			
Ground Rice	....	....	12	Vita Gravy	....	....	2
Butter	....	....	12	Christmas pudding & Plum			
Oatmeal	....	....	12	pudding	....	....	2
Arrowroot	....	....	12	Sausages, grilled	....	....	1
Gin	....	....	12	Cheese	....	....	1
Ammoniated tincture of				Sausage Roll	....	....	1
Quinine	....	....	12	Gravy Salt	....	....	1
Sausages	....	....	10	Jelly crystals	....	....	1
Luncheon pie, pork pie				Sponge mixture	....	....	1
and veal, ham & egg pie			8	Chicken, ham & tongue			
Sago	....	....	8	sausage	....	....	1
Brawn	....	....	7	Steak & Kidney pie	....	....	1
Custard powder	....	....	7	Jam pastries	....	....	1
Shredded Suet with flour	....	....	6	Lemonade crystals	....	....	1
Dried Mint	....	....	6	Table cream	....	....	1
Bacon	....	....	6	"Appeal to cow"			
Olive Oil	....	....	6	Milk samples	....	....	2
Mustard mixture	....	....	6				
Vinegar	....	....	6				
							<hr/> 450 <hr/>

Of the above 450 samples 36 were Drugs.

There were 30 unsatisfactory samples of which 28 were milk, 1 sago and 1 vinegar.

With reference to the unsatisfactory samples of milk, proceedings were instituted against 9 vendors and in 7 of these cases fines were imposed to a total amount of £26. 11. 0., the costs amounting to £11. 3. 0. The cases against the other 2 vendors were dismissed on payment of costs amounting to 14/6d. each.

In addition 3 vendors were cautioned, deficiency in milk fat was brought to the notice of 4 vendors and in the remaining cases no action was taken.

One sample purchased as sago was found, actually, to be tapioca, but in view of the similar nature of the two substances, no action was taken.

No action was taken with regard to the unsatisfactory sample of vinegar. The percentage of acetic acid was full strength but it was artificial vinegar and should have been described as such to distinguish it from malt vinegar.

## **PREVENTION AND CONTROL OF INFECTIOUS AND OTHER DISEASES.**

### **CO-ORDINATION OF HOSPITAL ACCOMMODATION.**

The admission of all cases of infectious disease to the four county isolation hospitals is arranged through the central office. Any admissions after office hours are dealt with by an official who is on the telephone at home.

A full report on the hospital treatment of infectious disease at the County Isolation Hospital, Markfield, is contained in Dr. Selby's report.

### **COMMENTARY ON INFECTIOUS DISEASE DURING THE YEAR.**

Every year, in this section of the report, the notifications and deaths from infectious diseases are reviewed—any increase or decrease on the figures for the preceding year, the areas most affected, the relative prevalence of the various diseases ; such observations are recorded, year after year, for this as for every other county in England. This is one aspect of what the sensational newspapers term “the incessant war against disease”. One cannot help feeling, sometimes, that this part, at least, of the struggle is conducted in a very unspectacular fashion. Like prudent generals, we do little except stand back in the safety zone recording the ebb and flow of the tide of battle. Years ago we formulated our plan of action—purely defensive—and we are slow to make changes, or to admit that it has not proved entirely satisfactory. What was good enough for Gran’fer is good enough for us, and public opinion must be considered before we decide to give up the old or take on the new. So we continue to employ the time-honoured measures of control which the public have grown to expect, even when they are troublesome and of doubtful utility, or even, as happens occasionally, possibly harmful.

The ancestor of this system of keeping yearly records of infectious disease was a book by Thomas Sydenham, which was first published in 1666. His chapters on “The Epidemic Constitution” of various years might well have borne the title at the head of the present section. Except that they were written in Latin and have, even in translation, a dignity of language which few modern writers can command, these chapters are little different from the health reports of the present day. But Sydenham, though he instituted the system, had more excuse for taking up the attitude of the disinterested observer than we ; he apparently believed that the



keeping of cold, scientific records might disclose something about the nature of "epidemic years" which would lead to their control. That hope has long been dissipated. We recognise, as he did, "that as each epidemic disease is attended with its periods of increase, height and decline in each subject, so likewise every general constitution of years that has a tendency to produce some particular epidemic has its periods"; but, so far as the commoner infectious diseases are concerned, we are not much nearer than he was to the power of controlling epidemic outbreaks by direct action. Small-pox, plague, malaria—these are no longer the pestilences they were in his time; but we must still record, year after year, the humiliating prevalence of measles, scarlet fever, diphtheria, pneumonia, tuberculosis.

But in spite of our comparative helplessness in the face of particular diseases, we have only to dip into medical history to realise, with amazement, how much has been achieved. Infectious disease, to-day, is a poor thing compared with its dread step-fathers of the past. The Influenza Pandemic of 1918 was a mild affair compared with the Black Death in the fourteenth century, which is said to have accounted for one-fourth of the population of the earth. In the eighteenth century small-pox was as common in England as measles is to-day. Sydenham, who referred to scarlet fever as "a disease in name only"—it was probably about as mild then as it is now—would not have been very impressed by the worst outbreak of any disease which Leicestershire has experienced in the present century. To what can we attribute such changes?

Improved sanitation, better housing, rational planning of cities and towns, a higher standard of living generally—factors such as these have probably played the principal part; in certain cases—notably in small-pox—more direct measures have been responsible in greater or lesser degree. To these, which have helped in the past, must we look for improvement in the future. The great scourges, leprosy, plague, small-pox, have been conquered because men feared them enough to take drastic steps to overcome them; the lesser evils can be wiped out too if we are prepared to attack them with energy and resolution.

There is much to be done yet in the improvement of housing conditions, water supplies, sanitation—especially in rural areas; there are still too many families barely existing at subsistence level; there is much ignorance, prejudice and sheer folly to be overcome. Our hospitals and clinics are not used to the best advantage, and we have not even begun to make effective use of the powerful weapon of immunisation against diphtheria. Too much of our work is the mere recording of the casualties lost to the common enemy.

If only we had shown in former years the same energy and enthusiasm in fighting disease as we have thrown more recently into "A.R.P."—how much might we not have achieved? If the September "crisis" had been a reaction to the latest epidemic; if the public were calling for classes on hygiene and disease prevention instead of first aid and "Anti-Gas"; if we were opening new hospitals and clinics and nursery schools instead of first aid posts and bomb-proof shelters; if conscientious objectors to vaccination and immunisation were as unpopular as the other kind . . . would there not be more hope for the future?

When will this stupid little animal, Man, grow up, and stop playing at soldiers?

#### REVIEW OF INFECTIOUS DISEASES.

There was little of unusual interest about the prevalence of infectious illness in the county during 1938. The returns relating to the chief notifiable diseases showed little change from the preceding year, except that a small epidemic of poliomyelitis occurred during the Autumn. Influenza, however, was much less common than last year, and the death rate from this cause dropped to as low a level as has been experienced in any year since 1914.

#### *Diphtheria.*

During 1938 there were 397 cases of diphtheria, with 19 deaths, as against 371 cases and 14 deaths in 1937, and 386 cases and 32 deaths in 1936. The areas most affected were Hinckley (101 cases), Coalville (80 cases) and Wigston (34 cases) among the urban districts, and Barrow-upon-Soar (57 cases) among the rural districts. The largest number of cases occurred during the first quarter of the year.

The following table shows the number of cases, the number of deaths and the case mortality from diphtheria for each year of the last decade:—

Year	Cases	Deaths	Case Mortality	Year	Cases	Deaths	Case Mortality
1929	362	34	9.4%	1934	150	13	8.7%
1930	323	14	4.3%	1935	288	22	7.7%
1931	166	12	7.2%	1936	386	32	8.3%
1932	124	11	8.9%	1937	371	14	3.8%
1933	125	10	8.0%	1938	397	19	4.8%

Yearly Average 1929-1938, 269 cases; 18 deaths.  
Case Mortality, 6.7%.

As mentioned in last year's report, the yearly incidence of diphtheria shows a fairly smooth and regular swing—as Sydenham pointed out “every general constitution of years that has a tendency to produce some particular epidemic has its periods.” Wave peaks occur at intervals of about eight years. Recently the number of “positive swabs” (patients found to exhibit the diphtheria organism in their throats, but without the characteristic symptoms) which have been notified as cases of diphtheria, has increased, and it is difficult to estimate whether, in fact, the disease is increasing or decreasing. The table does suggest, however, that some unusual factor produced a decline in the incidence during 1937; and it is significant that in that year, for the first time, diphtheria immunisation was brought to bear upon the epidemic areas.

During 1938 immunisation by members of the county staff was only carried out in two areas, South Wigston and Mountsorrel. As before, an offer was made to parents in the district to immunise any child between the ages of eight months and school leaving age, the cost being recovered from the district council. An immunisation course consisted of three intramuscular injections of Toxoid-Antitoxin Floccules (“T.A.F.”) at fortnightly intervals. The total number of children who received a full course during 1938 was 916.

#### SOUTH WIGSTON.

708 children received full course.

7 received 2 injections only.

5 received 1 injection only.

Total acceptances 720, school children 563, pre-school 157.

#### MOUNTSORREL.

208 children received full course.

3 children received 2 injections only.

7 children received 1 injection only.

This brings the total number of children immunised by the county council's staff in 1937 and 1938 to 2,423. There are 33,372 elementary school children in the county. The councils of certain districts have now adopted immunisation schemes organised by their medical officers in co-operation with local private practitioners. Details of these schemes will be given in the district annual reports but are not available at present; it is certain, however, that so far as the county, as a whole, is concerned, such immunisation as has been carried out could not be expected to have any appreciable effect on the incidence of diphtheria. Not until at least

30 per cent. of the susceptible population has been rendered immune can any marked benefit be expected ; although, of course, for any particular individual immunisation provides almost complete protection against the disease.

General schemes for the county have been discussed on several occasions, but the great difficulty has been shortage of staff. The recent A.R.P. drive has finally disposed of the question so far as the County Council's staff is concerned. District councils should, however, consider very seriously whether a comprehensive local scheme should not be put into operation without delay. In districts designated as reception areas for evacuees this question is a serious and an urgent one, owing to the fact that an influx of children from other areas would almost certainly result in a marked increase in infectious disease of every kind.

#### *Scarlet Fever.*

There were 834 cases and 3 deaths from scarlet fever in 1938. The number of cases was higher and the number of deaths lower, than in 1937, when there were 763 cases with 7 deaths. More cases occurred in urban than in rural districts, (urban 466, rural 368) but all three deaths occurred in rural districts.

The districts most affected were Loughborough (186 cases) and Coalville (156 cases) among the urban districts, and Ashby-de-la-Zouch (96 cases), Market Bosworth (95 cases) and Barrow-upon-Soar (68 cases) among the rural districts. The smallest number of cases occurred in the third quarter of the year.

#### *Pneumonia.*

In 1938, 308 cases and 138 deaths from pneumonia were recorded. The previous year had been a particularly bad one, with 463 cases and 148 deaths. In urban districts there were 169 cases and 69 deaths, Hinckley (75 cases) being most severely affected. In rural districts there were 139 cases and 66 deaths, the districts most affected being Barrow-upon-Soar (47 cases), Castle Donington (24 cases), Ashby-de-la-Zouch (23 cases) and Market Bosworth (20 cases). Over 40 per cent. of the cases occurred during the first quarter of the year.

#### *Measles.*

Measles and influenza are not notifiable diseases and their prevalence can best be estimated from the illness returns from elementary schools.



During 1938 four schools were closed for an average period of 14 "school" days on account of measles, 141 children being affected by the disease. Certificates of low attendance due to the prevalence of measles had to be issued to 20 other schools, and an abnormally low attendance was attributed in 6 other schools to measles in combination with other diseases.

There were five deaths due to measles during the year.

### *Influenza.*

No school had to be closed on account of influenza during 1938. In only one school was low attendance attributed to this disease. Influenza was the cause of 40 deaths, giving a death rate of 0.13 per 1,000 population. In 1937 there were 173 deaths from influenza, a death rate of 0.5 per 1,000. We have to go back to 1914 (32 deaths, death rate 0.12) before we find a lower influenza death rate than that for 1938, although in 1936, 1935 and 1930 a similar rate was recorded.

### *Poliomyelitis.*

A minor outbreak of acute anterior poliomyelitis occurred during 1938, a total of 20 cases being notified. The outbreak was investigated by the Deputy County Medical Officer and a full report of his investigation appears on another page. One case occurred in the first quarter of the year, 4 in the third and 15 in the fourth. The districts most affected were Shepshed urban (4 cases), Melton urban and rural (5 cases), Barrow-upon-Soar rural (3 cases) and Blaby rural (3 cases). There were no deaths.

### *Erysipelas.*

130 cases of erysipelas occurred, 64 being in urban and 66 in rural districts. Hinckley had 24 cases, Coalville 19, Loughborough 10, Barrow-upon-Soar R.D. 23 and Market Bosworth R.D. 13.

In 1937 101 cases of erysipelas were notified.

### *Puerperal Pyrexia.*

Fifty-one cases of puerperal pyrexia were notified, 24 in urban and 27 in rural districts. There were 15 deaths, 3 due to sepsis and 12 to other puerperal causes. In 1937 these numbers were 10 and 4 respectively.

### *Cerebro-Spinal Fever.*

There were 12 cases of cerebro-spinal fever, with 8 deaths, in 1938. Seven cases occurred in urban and 5 in rural districts, while the deaths were equally distributed.



*Encephalitis Lethargica.*

No cases were notified during the year.

*Enteric Fever.*

There were two unrelated cases, one at Loughborough and one at Castle Donington, during the year. There were no deaths.

*Ophthalmia Neonatorum.*

The following is a record for 1938 :—

Notified	Cases Treated		Vision unimpaired	Vision impaired	Total Blindness	Deaths
	At home	In hospital				
15	14	1	15	—	—	—

**TUBERCULOSIS.****REPORT OF THE CHIEF TUBERCULOSIS OFFICER.***Prevalence of Tuberculosis.*

It will be noted that the number of notifications of pulmonary tuberculosis has decreased by 31, while there has been a decrease in the number of deaths by 47. The figures for 1938 are :—notifications 190, deaths 115, death rate 0.38. The average numbers of the last five years are :—notifications 241, deaths 175, death rate 0.58.

There were 88 notifications of non-pulmonary tuberculosis as against 81 in 1937. The number of deaths was 30, a decrease of 10 on last year and the death rate is 0.10.

The total number of notifications for 1938 is therefore 278 as against 302 last year, and the deaths 145 as against 202.

**DETAILS OF THE SCHEME OF TREATMENT.***Hospital and Sanatorium Accommodation.*

Markfield Sanatorium has been practically full the whole year. The number of beds for tuberculosis cases is 130 (male block 38, female block 34, children's block 22, advanced block 36). The waiting list has varied during the year but on the whole has been kept within reasonable limits, and there has been no undue delay in obtaining a bed for a patient. The work of Markfield Sanatorium is included elsewhere in this report in a separate account by Dr. Selby.

*Public Assistance Institutions.*

There are a certain number of shelters available at these institutions for the treatment of old and chronic cases of pulmonary tuberculosis. The beds at Market Harborough Institution are used for women and those at Melton Mowbray Institution for men. The latter institution now has some shelters in place of the open-air shed which was previously in use before the alterations were put in hand. There are also a few beds at Loughborough Infirmary available for this type of case. Actually there are very few cases of pulmonary tuberculosis at present in these institutions but one or two patients have been transferred from them to the Sanatorium for treatment.

*Out-Patient Dispensary Work.*

For details see table 1.

The number of attendances at the dispensaries has been 5,143 which is an increase of 140 on the number for 1937.

X-ray photographs have been taken at Markfield Sanatorium, where necessary, for cases of pulmonary tuberculosis, and a certain number of cases of surgical tuberculosis have also been X-rayed there during the year. The total number taken was 518 which includes 254 screenings, and this is a decrease of 23 actual photographs as compared with the previous year.

The number of specimens of sputum examined was 518, an increase of 38 on the number for 1937.

*Domiciliary Work.*

(i) Shelters.—About 70 shelters are available for loan to patients. The routine inspections, as heretofore, have been carried out by the County Nursing Association and during the past year 383 inspections have been made.

(ii) Nursing of advanced cases.—This part of the scheme has also been performed by the County Nursing Association, and 3,134 visits have been paid by the district nurses. This is a decrease of 89 on the number for last year.

(iii) Extra nourishment.—Approximately £358 has been expended on 74 patients. The grant is one pint of milk per day and one dozen eggs per week to each patient. There is no doubt that the addition made to the diet by this means is a real help to the patients who receive it.

(iv) Additional help.—The cost of splints, crutches, surgical boots, travelling expenses, etc., has entailed an expenditure of £76 on 35 patients as against £64 for 28 patients last year.

The number of cases receiving dental benefit has been very small for the same reason as previously mentioned, namely that dental benefit can be obtained from approved societies and other sources.

Cod liver oil and malt has been given to numbers of suitable cases at all the out-patient dispensaries, and this is a very valuable adjunct to the nutritional side of the treatment.

Dicalcium phosphate wafers, paper handkerchiefs, sputum flasks and inhalers have also been distributed.

(v) Domiciliary visits.—The tuberculosis medical officers have paid 627 (Dr. Coward 602, Dr. Lane 1,025) visits to patients' homes. The health visitors paid 4,539 and the district nurses 3,134 visits.

#### *Surgical Tuberculosis.*

The following institutions receive surgical tuberculosis cases (bone and joint disease) from the county :—

The Leicester City General Hospital (Orthopædic wards).

The Warwickshire Orthopædic Hospital. Coleshill.

The Harlow Wood Orthopædic Hospital, Mansfield.

The Children's Hospital, Gringley-on-the-Hill.

The Hospital of St. Cross, Rugby.

The number of patients admitted to these institutions during the year, and the numbers remaining under treatment and other information will be found in Table 2.

Other surgical tuberculosis cases including tubercular glands, abdomen, kidney, etc., are treated at Markfield Sanatorium, and the figures concerning these will be found in the Sanatorium Report.

#### *After-Care Work.*

This work is done largely by the tuberculosis medical officers, health visitors, district nursing associations, through their nurses, public assistance committees, and private agency and is, I believe, satisfactorily performed so far as the present financial circumstances will allow.

As in the past many new houses have been obtained, employment of a suitable nature procured, clothing distributed and help in many other directions given in an endeavour to consolidate the treatment given in an institution and to help not only the patients but also their relatives at the same time.

*Public Health Act, 1936 (Section 172).*

No action has been taken under this section which deals with the compulsory removal to hospital of advanced cases of pulmonary tuberculosis.

In conclusion special attention must be drawn to the figures in the opening paragraphs of this report. The number of deaths from phthisis 115, and the death rate 0.38 are records for the county and very much below any figures that have previously been shown. The previous lowest number of deaths from pulmonary tuberculosis was 157 in 1936 and the death rate in that year was 0.53. It can thus be seen what a very great decrease there has been. The number of deaths from non-pulmonary tuberculosis 30 is also the lowest ever obtained, the previous lowest being 34. There is a decrease, also, in the total number of notifications by 24 and though this is not so great as in the case of the deaths, still it may be considered as satisfactory.

It is, perhaps, a little difficult to account for these noteworthy figures and it may be that it is part of a general improvement throughout the country, or, on the other hand, it may be that this is a "freak" year. Perhaps too, one might claim that the high number of attendances at the dispensaries, which means increased supervision of the patients and also the excellence of the treatment which they receive at the County Sanatorium, may have something to do with it. One can only hope that this satisfactory state of affairs may be continued.

We may, therefore, look back upon the results of the year's work as being, on the whole, very creditable.

N. A. COWARD,  
*Chief Tuberculosis Officer.*





REPORT BY THE MEDICAL SUPERINTENDENT OF THE  
LEICESTERSHIRE COUNTY SANATORIUM AND ISOLATION  
HOSPITAL, MARKFIELD.

	1938	Average of previous 5 years
Beds provided .....	206	190
No. of Cases on 1st January, 1938	206	175
No. of Cases admitted .....	887	823
No. of Cases discharged .....	894	799
No. of Cases on 31st December, 1938	199	199

During the year 1938, the hospital has again been exceptionally busy, and in this report the opportunity is taken of comparing the work with the average amount performed during the previous five years.

The total number of patients admitted and discharged shows a rise over the previous year, and is well above the average.

The average number of beds occupied daily throughout the year was 200.6, that is 124.6 tuberculosis and 76 infectious diseases. The highest number of patients under treatment at any one time was 239.

In the sanatorium the new cubicles for 12 extra beds have been completed and came into use in the latter part of the year ; the accommodation is now for 122 in ward cubicles and 20 in outdoor cabins.

In the isolation hospital, there has been a slight fall in the number of cases of diphtheria, but an increase in the incidence of scarlet fever, and during the autumn an outbreak of infantile paralysis necessitated the admission of several cases.

My report on the nursing staff has been under consideration by the Committee, and a scheme has been adopted for the addition to the administration block of 20 bedrooms, together with certain other amenities.

During the year further acreage has been added to the hospital farm, and the capacity of the sewage plant is being increased.

The number of beds has been increased by the completion of the 12 new cubicles, but some of the outdoor cabins will not be in use during the winter months.

## TUBERCULOSIS.

		1938	Average of previous 5 years
Beds Provided	Men ....	56	54
	Women ....	52	52
	Children ....	22	22
	Total ....	130	128
No. of Cases on 1st January, 1938	Men ....	52	49
	Women ....	49	48
	Children ....	18	17
	Total ....	119	114
No. of Cases admitted	Men ....	124	128
	Women ....	99	119
	Children ....	42	48
	Total ....	265	295
No. of Cases discharged	Men ....	120	127
	Women ....	106	119
	Children ....	38	46
	Total ....	264	292
No. of Cases on 31st December, 1938	Men ....	56	50
	Women ....	42	48
	Children ....	22	19
	Total ....	120	117

The average number of beds occupied daily was 124.6—95.8 per cent. The average duration of treatment was 180.9 days (men 180, women 183, children 177), excluding those patients who stayed less than 4 weeks.

The routine treatment based on adequate rest, balanced dietary and good hygiene, remains unchanged, but the number of patients undergoing specialised forms of treatment continues to expand.

The provision of religious services, circulating library, games and entertainments including cinema shows continue to add greatly to the amenities enjoyed by the patients.

## Average Stay of Tuberculosis Patients during 1938.

Classification on Admission	MEN		WOMEN		CHILDREN	
	No. of Pts.	Average Stay-Days	No. of Pts.	Average Stay-Days	No. of Pts.	Average Stay-Days
PULMONARY						
T.B. Negative ....	28†	177	31†	154	14	195
T.B. Pos.—Group 1	5	175	3	163	—	—
T.B. Pos.—Group 2	46	196	34	211	—	—
T.B. Pos.—Group 3	28	156	24	169	1	18
NON-PULMONARY						
Bones and Joints ....	—	—	1	131	3	85
Abdomen ....	—	—	—	—	4‡	206
Other Organs ....	1	182	5	145	1	227
Glands ....	1	189	2	74	5	224
*Observation ....	6	21	5	25	9§	25

\* In addition 5 men, 1 woman and 1 child admitted for observation were notified and retained for treatment.

† One man and 3 women admitted as T.B. negative, but on discharge the diagnosis was not confirmed.

‡ One admitted as N.P.2—diagnosis not confirmed.

§ One admitted as observation—no diagnosis made.

*Artificial Pneumothorax.*

By this form of treatment the affected lung is collapsed and tension relaxed to encourage healing of the diseased areas, and this necessitates frequent refills of air into the cavity of the chest extending over 2 or 3 years.

50 patients had artificial pneumothorax treatment during the year and 978 refills were given, as compared with 37 patients, 860 refills in the previous year, and an average of 28 patients, 558 refills in the past 5 years.

7 children are included in these numbers, the youngest being 10 years of age.

2 patients completed the treatment and in 12 cases refills were abandoned as ineffective, leaving 36 patients still under treatment at the end of the year of whom 12 were still in the sanatorium and 24 were attending for refills as out-patients.

*Aurotherapy.*

The use of gold salts by injection directly into the blood stream or into the muscle tissues has been continued especially in those cases unsuitable for artificial pneumothorax, and when the sputum persistently contains tubercle bacilli.

33 cases were considered suitable, but treatment had to be abandoned in 6, and had not been completed in a further 6.

21 completed cases can thus be reviewed, 19 being T.B. positive and 2 T.B. negative.

12 became quiescent, 15 gained weight, 14 had an improved blood sedimentation rate.

Of the 19 T.B. positive cases, 13 lost the bacilli from their sputum.

### *Heliotherapy.*

Although considered somewhat dangerous to sufferers from pulmonary tuberculosis, exposure to artificial sunlight is of considerable importance in the treatment of disease affecting other parts of the body, and the majority of patients treated are children suffering from tuberculosis of glands and abdomen.

Treatment consists of graduated doses to the whole body reinforced if necessary by local irradiation, and is carried out thrice weekly.

The number of cases treated, the site of the disease and the number of exposures given are tabulated below.

Site of Disease	No. of Cases	No. of Treatments
Bones and joints ....	1	7
Abdomen ....	12	578
Genito-urinary ....	3	193
Glands ....	16	789
Miscellaneous ....	3	127
Total ....	35	1694

### *Blood Sedimentation Rate.*

This estimation of the rate of fall of red blood cells provides an index of the amount of toxæmia suffered by the patient, and is correlated with the findings of clinical examination, sputum tests and X-ray appearances.

During the year 1,468 tests were made as compared with an average of 1,307 during the previous 5 years.

*Mantoux Tests.*

The injection into the layers of the skin of various dilutions of tuberculin gives rise to a reaction in persons who have previously been infected by the tubercle bacillus. The test is used mainly in cases sent for observation, with a view to diagnosis, and was performed on 60 occasions as compared with an average of 55 in the previous 5 years.

*X-ray Department.*

The use of the X-ray apparatus continues to grow, and a total of 1,499 investigations were performed, the average for the previous 5 years being 1,180.

The X-ray film is essential in the diagnosis of out-patients sent by tuberculosis officers and from other clinics, and in assessing accurately the extent of disease, indications for active treatment and subsequent progress of in-patients, while screening of the collapsed lung is necessary at frequent intervals during treatment by artificial pneumothorax.

All examinations and reports are made by the Medical Superintendent.

The apparatus has been improved recently by the purchase of a new trolley table, incorporating a more accurate time switch.

Screening.	In-patients ....	571	
	Sent by tuberculosis officers ....	254	
		—	825
Films.	In-patients ....	401	
	Sent by tuberculosis officers ....	264	
	Sent by other clinics ....	9	
		—	674
	Total ....		1,499

*Laboratory.*

The work of the laboratory is carried out by the medical staff and deals with material from both tuberculosis and infectious disease wards. Most of the investigations are bacteriological in nature, and during the year 4,818 examinations were performed, the average for the previous five years being 3,642. These examinations are detailed as follows :



Sputum for tubercle bacilli ....	....	1,249
Urine for tubercle bacilli ....	....	41
Effusions for tubercle bacilli ....	....	18
Cultures for diphtheria bacilli ....	....	3,425
Smears and pus ....	....	37
Cerebro-spinal fluid ....	....	33
Blood counts, etc. ....	....	15
		<hr/>
		4,818
		<hr/>

### *Types of Case and Results of Treatment.*

The results of treatment set out as required by the Ministry of Health will be found elsewhere in this report; further analysis is made below.

264 cases of tuberculosis completed a course of treatment in the sanatorium. 204 were cases of adult phthisis, 16 were of childhood pulmonary disease, and 24 were of non-pulmonary or surgical tuberculosis; another 27 cases were admitted for observation, and of these 6 have been included in the 204 cases of adult phthisis, and one in the 16 of childhood disease mentioned.

71 of the adults were T.B. negative or early T.B. positive, and of these 82 per cent. became quiescent, and only 5 per cent. died.

133 cases were moderately or well advanced T.B. positive and of these only 23 per cent. became quiescent and 23 per cent. died.

141 cases were T.B. positive; as a result of treatment 39 per cent. lost their sputum entirely or the bacilli from their sputum; all the early cases achieved this end, half the moderately severe cases and only 10 per cent. of the advanced cases.

### **1.—Pulmonary Tuberculosis in Adults.**

Classification	Number of cases	Result		Gained weight	Lost sputum or bacilli
		Quiescent	Died		
T.B. Negative ....	63*	79%	6%	81%	—
T.B. Pos.—Group 1	8	100%	—	100%	100%
T.B. Pos.—Group 2	81†	37%	6%	81%	54%
T.B. Pos.—Group 3	52	2%	50%	27%	10%

\* Includes 4 patients admitted for observation.

† Includes 1 patient admitted for observation.

**2.—Pulmonary Tuberculosis in Children.**

Classification	No. of cases	Result		Gained weight
		Quiescent	Died	
T.B. Negative ....	15*	87%	13%	87%
T.B. Pos.—Group 1	—	—	—	—
T.B. Pos.—Group 2	—	—	—	—
T.B. Pos.—Group 3	1	—	100%	—

\* Including 1 admitted for observation.

**3.—Non-Pulmonary Tuberculosis.**

Classification	No. of cases	Result	
		Quiescent	Died
Bones and Joints....	1 adult	—	—
N.P.1 ....	3 children	67%	33%
Abdomen ....	0 adults	—	—
N.P.2 ....	4 children	50%	—
Glands ....	3 adults	67%	—
N.P.4 ....	5 children	80%	—
Other organs ....	7 adults	71%	14%
N.P.3 ....	1 child	100%	—

The cases of tuberculosis of “other organs” are made up as follows :—  
3 kidney, 1 epididymis, 1 miliary, 1 polyserositis, 2 fallopian tubes.

**4.—Cases admitted for Observation and Diagnosis.**

17 adults :—6 accepted as tuberculous, retained for treatment and became quiescent : 11 discharged as not suffering from active tuberculosis.

10 children :—1 accepted as tuberculous, retained for treatment and became quiescent : 8 discharged as not suffering from active tuberculosis, 1 took own discharge prior to diagnosis being made.

**INFECTIOUS DISEASES.**

1938 has been the fifth year in succession during which the number of cases of infectious diseases in the county has remained exceptionally high. The total number treated in the hospital, although not so great as in 1935, shows an increase over last year and is well above the average for the preceding five years.

The average number of beds occupied daily was 76, and the highest number under treatment at any time was 112.

	1938	Average of previous 5 years
Beds provided ....	76	62
No. of cases on 1st January ....	87	61
No. of cases admitted....	622	528
No. of cases discharged ....	630	507
No. of cases on 31st December	79	82

Fewer cases of diphtheria, typhoid and cerebro-spinal fever were admitted but the numbers of cases of scarlet fever, erysipelas and puerperal fever increased, and in the latter part of the year several cases of infantile paralysis were admitted.

The average age of all cases was  $12\frac{1}{2}$  years.

#### *Scarlet Fever.*

	1938	Average of previous 5 years
No. of cases on 1st January ....	45	35
No. of cases admitted....	378	359
No. of cases discharged ....	379	350
No. of cases on 31st December	44	44

The diagnosis could not be confirmed in 13 cases, but scarlet fever occurred in an additional 6 cases already suffering from diphtheria.

379 cases were discharged, 85 being adults and 294 children ; the average age was 11 years.

The average length of treatment was 41 days.

243 cases were treated by injection of antitoxin.

Death occurred in 4 cases, the causes being pneumonia, heart failure, purpura hæmorrhagica and acute dilatation of the stomach.

The following complications arose during treatment.

Otorrhœa ....	22	Rheumatism ....	12
Mastoiditis ....	3	Nephritis ....	1
Relapse ....	6		

*Diphtheria.*

	1938	Average of previous 5 years
No. of cases on 1st January ....	41	23
No. of cases admitted....	189	137
No. of cases discharged ....	195	129
No. of cases on 31st December	35	31

The diagnosis could not be confirmed in 27 cases.

195 patients were discharged, the disease affecting the fauces in 138, the larynx in 6, and the nose in 7 cases, while 17 were carriers only.

There were 50 adults and 145 children, the average age being 12.7 years.

The average duration of treatment was 56 days.

164 cases received injections of antitoxin, the average dose being 83,000 units, evidence of the increasing severity of a certain number of the cases.

8 deaths occurred in cases of diphtheria, and one other death was due to measles-pneumonia in a case not confirmed as suffering from diphtheria.

Complications arising during treatment were as follows :—

Paralysis	{ peripheral	....	15
	{ cardiac	....	6
Otorrhœa	....	....	6

*Typhoid Fever.*

3 cases were admitted as compared with an average of 6 in previous years.

The diagnosis could not be confirmed in 2 of these cases, one of whom was suffering from scarlet fever, and the other died of cirrhosis of the liver

*Erysipelas.*

11 cases were treated during 1938, 9 being adults and 2 children with an average age of 45 years.

The disease affected the face in all of the cases.

The average period of treatment was 13 days.

2 patients died aged 79 and 65 years of pneumonia and uræmia respectively.

Treatment is principally by drugs of the sulphonamide group, and by local applications.

#### *Puerperal Fever.*

18 cases have been treated this year, as compared with a previous average of 8.

7 cases were accompanied by their babies.

The average age was 27 years, and the average stay in hospital was 34 days.

One death occurred and 4 others developed complications.

Treatment is based on local measures, blood transfusion, and drugs of the sulphonamide group.

#### *Cerebro-Spinal Fever.*

6 cases of this disease have been treated, the average number in the previous 5 years being 3.

One was an adult and 5 were children, the average age being 20.

The average period of treatment in hospital was 21 days.

3 deaths occurred, one of which was within 24 hours of admission.

Treatment is by lumbar puncture, and the administration of serum by all routes, and by drugs of the sulphonamide group.

#### *Acute Anterior Poliomyelitis.*

Infantile paralysis occurred in the county mainly during September, 1938, and 12 cases were admitted into this hospital ; the diagnosis could not be confirmed in 5 of these.

5 cases were adults and 7 were children ; the average age being 14 years.



The disease affected mainly the arms in 2 cases, mainly the legs in 4 cases, and was severe and generalised in one case.

There were no deaths from this disease.

The average duration of isolation was 29 days and arrangements were made in each case for continuation of treatment by orthopædic measures.

#### *Other Diseases.*

Include measles and whooping cough, complicated by pneumonia.

#### STAFF.

The hospital undertakes the training of probationer nurses for periods of 3 years in preparation for the examinations of the General Nursing Council in fever nursing, and of the Tuberculosis Association for their certificate.

During 1938, 18 successes were obtained in these examinations, 9 in the preliminary and 9 for the final certificate.

Dick and Schick tests are performed on all new entrants to the staff to ascertain susceptibility to scarlet fever and diphtheria. Immunisation against these diseases is carried out on those not immune and further tests are made subsequently.

Dick tests	....	42	Immunisation against scarlet fever	5
Schick tests	....	47	Immunisation against diphtheria	9

All the staff are treated by the Medical Superintendent under the National Health Insurance scheme, and although the general level of health remained good, the following required attention :—

Tonsillitis	....	....	11	Diphtheria	....	....	....	2
Miscellaneous	....	....	24	Scarlet fever	....	....	....	1
Influenza	....	....	2	Otitis media	....	....	....	1
Catarrhal Jaundice 1.								

The nurse suffering from scarlet fever had been previously found to be Dick negative and one of the diphtheria cases had been immunised, but had apparently lost her immunity subsequently.

H. SELBY,  
*Medical Superintendent.*

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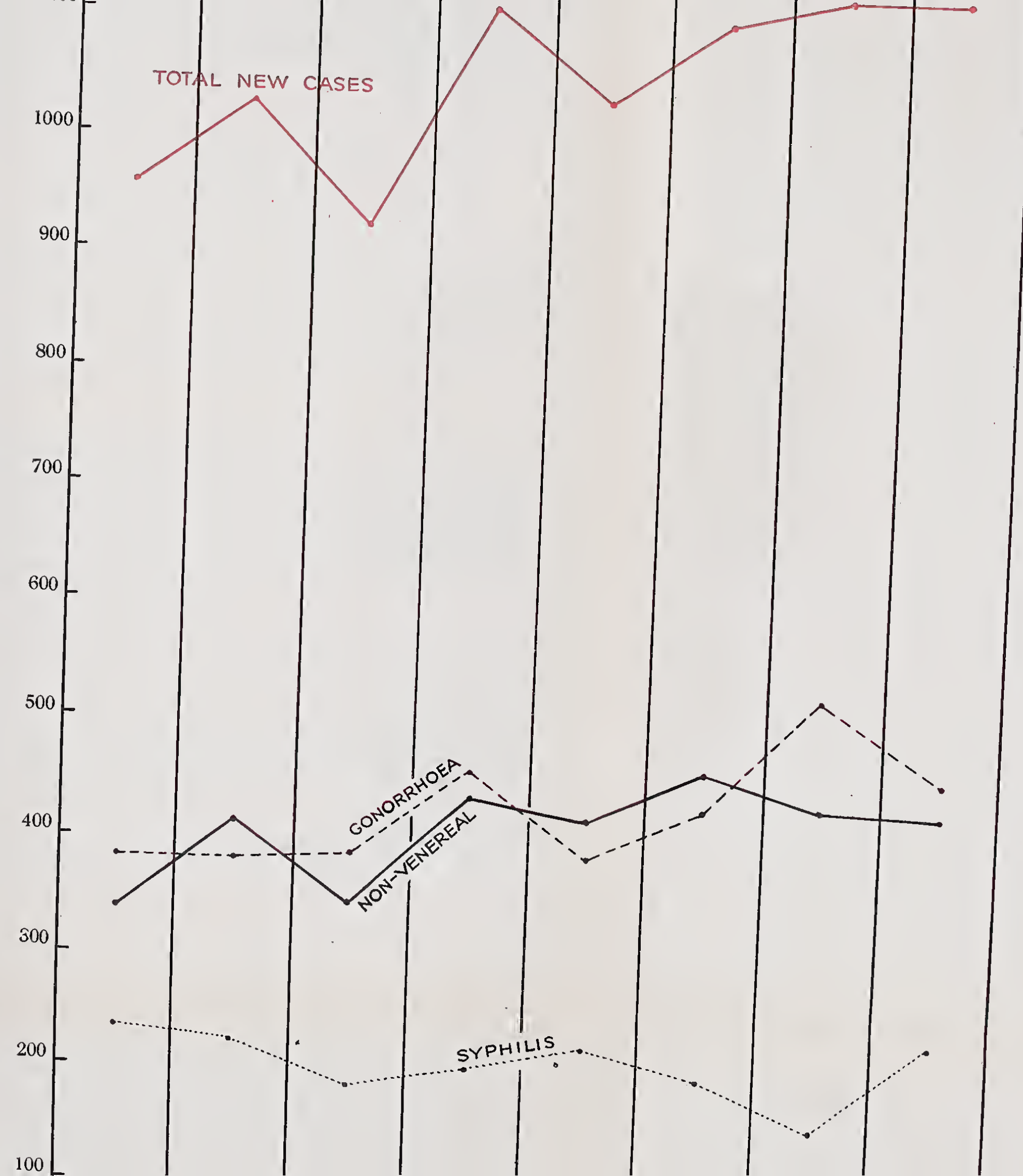
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H. SELBY,  
Medical Superintendent.





## VENEREAL DISEASES.

The County Council makes provision for the treatment of Venereal Diseases by co-operation with the authorities of the Leicester Royal Infirmary. The administration of the clinics is carried out by Dr. C. Hamilton Wilkie, director of the Venereal Diseases Services.

### *Pathological Work.*

All the bacteriological and biological work for the diagnosis of tests for cure of venereal diseases at the clinics is undertaken at the Leicester Royal Infirmary but a certain amount of bacteriological work for practitioners in the county is undertaken at the county laboratory.

### REPORT ON THE VENEREAL DISEASES CLINICS FOR THE YEAR 1938.

BY C. HAMILTON WILKIE, M.B., Ch.B., B.Sc.

DIRECTOR OF VENEREAL DISEASES SERVICES.

I herewith submit the annual report on the work of the venereal diseases departments at Leicester Royal Infirmary and at St. Mary's Home for the year 1938.

The primary centre, that at Leicester Royal Infirmary, will be reported on first.

### *Statistics.*

The new cases coming for the first time to the centre at the Royal Infirmary numbered 1,050 ("New Cases"). In 1937 these "New Cases" numbered 1,051. In addition 55 cases reported for the first time who had previously attended some other venereal disease centre ("Transfers IN"). An additional 21 cases, who had been removed from the register during some previous year, returned in 1938 for treatment or observation of the same infection ("Returned Defaulters").

The total number of "New Cases," "Transfers IN," and "Returned Defaulters" is thus 1,126. For the previous year this number was 1,128.

The table, shown below, gives details of all the cases, and the Graph shows how the numbers have varied since 1931. The numbers for the graph are taken from the official Ministry of Health Form V.D. (R) (revised). This Form first appeared in 1931.

The most important point concerning the new cases is a marked increase in early syphilitics. Special reference will be made to this later.

The "new" acute and chronic gonorrhœal cases numbered 421, a decrease of 68 on the previous year.

Non-venereal cases numbered 434, four less than in 1937.

The total number of attendances for the year was 29,505, (1937—32,667). This number may be sub-divided into 15,695 seen by the medical officers and 13,810 intermediate attendances not seen by the medical officers.

In-patients totalled 179 (1937—200) and the aggregate number of "in-patient days" 4,466 (1937—4,384).

The sources of male infection, when definitely known (long-duration "acquired syphilis" excluded), were as follows :—

Stranger (not financially acknowledged) ....	226
So-called "Friend" ....	64
Wife (extra-marital exposure emphatically denied and wife proved to have V.D.) ....	48
Prostitute (financially acknowledged) ....	35
Fiancée, or intended fiancée ....	21
Parents or grandparents ( <i>i.e.</i> , hereditary) ....	4

Analysis of male occupations :—

Labourers ....	153
Engineers ....	134
Shop assistants ....	71
Boot and shoe ....	70
Building ....	61
Transport ....	59
Travellers ....	57
Hosiery ....	56
Office workers ....	37
Agriculture ....	27
Miners ....	18
Managers ....	11
Printing ....	7
The Services ....	6
Schoolchildren ....	6
Miscellaneous ....	6
Total ....	779



From whom sent (Males only) :—

"Self" ....	408
Medical practitioners ....	225
Other infirmary depts. ....	69
"Transfers IN" ....	49
Female V.D. department ....	15
Other members of family ....	13
Total ....	<u>779</u>

Numbers from various areas in the county of Leicestershire (Male cases only) :—

Area.	No.
Hinckley ....	54
Coalville ....	49
Loughborough ....	49
Melton Mowbray ....	26
Market Harborough ....	21
Lutterworth ....	10
Within five miles of city ....	18
Total ....	<u>227</u>

Males and Females "New Cases"

	Leicester	Leicestershire
Syphilis ....	142	53
Gonorrhœa ....	297	124
Non-venereal ....	313	121
Total ....	<u>752</u>	<u>298</u>

New Male cases—Married, single, widower, or at school :—

Married ....	393
Single ....	371
Widower ....	9
School ....	6
Total ....	<u>779</u>

Age incidence of new male cases :—

Years	15—	20—	25—	30—	35—	40—	45—	50—	55—	60—	70
Number	9	42	180	169	127	89	63	37	32	17	14

Male cases known to have had at least one previous attack of venereal disease numbered 46.

Eleven men had a double infection :—syphilis and gonorrhœa.

*Pathological Work.* (Male and female departments).

Tests for spirochætes	83	C.S.F. examinations	....	70
Blood tests (W.R.)	....1251	Smears for gonorrhœa	....	3042
Blood tests (Kahn)	.... 974	Other tests	....	.... 19
Gonococcal C.F.T.	.... 140			

*Defaulters and Propaganda Work.*

Every effort is being continued to keep our defaulters reduced to a minimum. We in Leicester are particularly fortunate in having a low percentage of defaulters. I believe that our extensive campaign against venereal diseases, in the form of public lectures, (commenced in 1931) has done much in this direction.

The following two public lectures were given during the year :—

Wednesday, 30th March, 1938. Little Theatre Hall, Dover Street,  
Leicester.

For Men only. Speaker Dr. C. Hamilton Wilkie,  
(Director of V.D. Services).

Thursday, 31st March, 1938. Little Theatre Hall, Dover Street,  
Leicester.

For Women only. Speaker Dr. Mary Newton Davis,  
(Assistant Female V.D. Medical  
Officer).

## TREATMENT OF VENEREAL DISEASES.

The year 1938 has been noteworthy in the history of the treatment of gonorrhœa. New and far reaching chemo-therapeutic methods of treating the disease have begun, and although it is yet too early to forecast the ultimate result, one can safely say, at this stage, that it is likely that gonorrhœal cases will become less numerous in the future. Other factors connected with this new and advanced method of treating gonorrhœa are likely to appear. Already, however, some venereal disease specialists are reporting a marked increase in "defaulters," who have not been proclaimed cured, although perhaps the more acute signs and symptoms have rapidly disappeared. Other unexpected difficulties may appear.

Leicester venereal disease department has made every effort to keep abreast of the times. During the year I conducted a large investigation on the drug "Uleron" in the treatment of gonorrhœa. Over 200 cases were treated and a report was published in the British Medical Journal (vol. 1, pp. 57 ff. 14th January, 1939.). More extensive investigations are being conducted on the use of the drug "M. & B. 693" in male and female gonorrhœa and I hope soon to publish valuable information on this important branch of medicine.

It is more necessary than ever to place much stress on thorough "tests of cure" for gonorrhœal cases. Many tests over a considerable period are essential, otherwise, I am afraid, relapses will be common.

## THE INCREASE IN EARLY SYPHILITIC CASES.

The most important characteristic of the new cases this year is the increase in primary and secondary syphilis. "New" primary and secondary syphilitics number 89 (1937—23). Seventy of these cases were males, nineteen females. The chief source of this increase may probably be traceable to the activities of a few prostitutes who frequent a small area of Leicester. This increase has been reported to the Public Health Department and to the Police. As far as I know, not one of the women in question has reported at the V.D. centre.

## ST. MARY'S HOME.

In connection with venereal diseases valuable work is done at this home. The young unmarried girl with venereal disease is very suitably and efficiently treated.

It sometimes happens that the girl is also pregnant. It is then even more essential that she is carefully treated and looked after.

These girls gain much from the extremely important social welfare work of the home. Work, a good home, and perhaps the first real start in life may be given to them.

The medical officer in charge of the female V.D. department at the Royal Infirmary visits the home twice weekly, once for an out-patient session and once for an in-patient session.

The following are the details of the cases treated in St. Mary's Home for 1938 :—

*New Cases.*

Syphilis	....	9	(4 of these cases had also gonorrhœa. They must be counted as two cases each).
Gonorrhœa		27	
Non-V.D.	....	7	
		—	
Total	....	43	
		—	

Attendances totalled 1,076 ; Extra dressings 1,476 ; Injections 201.

#### CITY GENERAL HOSPITAL.

Acting in the capacity of Consultant Venereologist to the City General Hospital I have visited it once per month during the year.

#### CONCLUDING REMARKS.

The bulk of our new cases come directly, on their own initiative, to the venereal disease clinic. Co-operation with the general practitioners of the area served, with the other hospitals and clinics, and with the other departments of the Royal Infirmary itself, is increasingly evident.

The cost of running the venereal disease department is important. This department has perhaps appeared somewhat extravagant as compared with some centres serving an area of a similar size. But if all the factor

re taken into consideration, especially the high efficiency, the up-to-date methods, the small number of defaulters, and the high number of definite cures, the cost is reasonable. Our object is to conduct the department economically, but at the same time not to sacrifice efficiency. I believe that to be the correct policy.

In conclusion I should like to acknowledge the valuable assistance and co-operation of all in the Royal Infirmary, the City General Hospital and Public Health Departments, who are in any way connected with my department.

The pathologist, Dr. W. W. Mackarell, does an important and extensive part of our work and the Royal Infirmary dispensers and clerks render valuable assistance. I also appreciate the valuable work done by those within St. Mary's Home.

I wish to thank the medical officers of the V.D. Department, the senior male nurse (Mr. A. E. Robertson), sister J. M. Owen, the nurses and attendants.

C. HAMILTON WILKIE.



TABLE. (Male and Female Cases).

1938	VENEREAL CASES						NOT V.D.		Totals		Grand Total
	Syphilis		Soft Sore		Gonorrhœa		M.	F.	M.	F.	
	M.	F.	M.	F.	M.	F.					
Cases on Books January 1st, 1938 ....	215	182	—	—	149	98	6	1	370	281	651
Returned Defaulters ....	12	7	—	—	1	1	—	—	13	8	21
Syphilis Primary ....	45	5	—	—	—	—	—	—	45	5	50
" Secondary ....	25	14	—	—	—	—	—	—	25	14	39
" Latent, 1st year ....	—	—	—	—	—	—	—	—	—	—	—
" All later stages ....	53	43	—	—	—	—	—	—	53	43	96
" Congenital ....	4	6	—	—	—	—	—	—	4	6	10
Soft Sore ....	—	—	—	—	—	—	—	—	—	—	—
Gonorrhœa ....	—	—	—	—	271	150	319	115	271	150	421
Non-Venereal ....	—	—	—	—	—	—	—	—	319	115	434
Transfers IN ....	15	1	—	—	34	5	—	—	49	6	55
Totals ....	369	258	—	—	455	254	325	116	1149	628	1777
Cured and N.V.D's, ....	50	23	—	—	176	87	317	109	543	219	762
Ceased attendance before completion of treatment ....	16	37	—	—	35	39	—	—	51	76	127
Ditto, after completion of treatment but before all tests ....	15	13	—	—	55	4	—	—	70	17	87
Transferred OUT ....	37	10	—	—	60	18	—	—	97	28	125
On records, 31/12/38 ....	251	175	—	—	129	106	8	7	388	288	676
Attendances, seen by M.O. ....	4215	3789	—	—	4053	2660	703	275	8971	6724	15695
" intermediate ....	93	—	—	—	8757	4698	187	75	9037	4773	13810
Total Attendances ....	4308	3789	—	—	12810	7358	890	350	18008	11497	29505
In-Patients ....	35	6	—	—	50	75	2	11	87	92	179
Aggregate Days ....	621	142	—	—	1195	2328	7	173	1823	2643	4466

## SPECIAL ARTICLES.

### (1) ACUTE ANTERIOR POLIOMYELITIS.

Acute Anterior Poliomyelitis is an infectious disease which appears in epidemic form with varying frequency and severity, and although it has been suggested that this disease is of ancient origin it is probable that in epidemic form at any rate, it did not become prevalent until the beginning of this century. The disease is more commonly known as "Infantile Paralysis" which term is somewhat misleading as adults may contract the disease and paralysis does not always supervene.

The causative organism is a virus and is the smallest of the known organisms with the exception of those causing yellow fever and foot and mouth disease. It is as yet uncertain, however, whether the disease we call poliomyelitis is in fact one disease or a group of two or more diseases as outbreaks differ somewhat in character, and indeed, many of the facts concerning it are only partially understood or entirely unknown. To understand any communicable disease it is essential to have a reasonably complete knowledge of the ætiology, incubation period, mode of transmission, method of entry of the causative organism into the body, specific treatment and prevention. Diphtheria for instance is a disease about which we have an extraordinarily complete knowledge in comparison to which our present knowledge of infantile paralysis is woefully inadequate.

Certain factors such as deficiency of vitamin B, or antecedent injury of some kind are said to predispose to an attack of the disease, while it has been also suggested that there may be some relationship between diphtheria and anterior poliomyelitis, as both attack the central nervous system. Evidence in support of this contention was produced in one epidemic of acute anterior poliomyelitis when it was found that the majority of cases gave a positive Schick test.

In England we have fortunately escaped the large epidemics of the disease which have from time to time ravaged other countries, notably the United States and Scandinavia, but a number of minor epidemics have occurred in this country and sporadic cases appear in small numbers each year.

In 1912 acute anterior poliomyelitis was made notifiable throughout England and Wales and since then the peak periods of the disease have been as follows :—

TABLE 1.

Year	Number of cases notified	
	England and Wales	Leicestershire
1913	927	2
1924	777	6
1926	1,159	72
1927	801	9
1933	714	3
1937	768	0

It will be seen from the above table that there is no evidence of a regular rise and fall in the notifications of the disease such as occurs in measles which has a biennial rise in the number of cases notified.

#### OUTBREAKS IN LEICESTERSHIRE.

Since 1912, when notification of poliomyelitis became compulsory a total of 192 cases have occurred. It will be seen in Table 1 that during the years when epidemics were prevalent in England and Wales a corresponding rise in the notifications occurred in Leicestershire in one year only, 1926.

In 1935 the disease reached epidemic proportions in the county when the total number of cases notified was 37, the corresponding figure for England and Wales being 633, only slightly above the average.

Of the 192 cases notified since 1912 nearly two-thirds occurred in rural districts and the districts in which notifications reached double figures were :—

Melton Mowbray U.D.	....	19 cases
Barrow-on-Soar R.D.	....	21 „
Billesdon R.D.	....	14 „
Melton and Belvoir R.D.	....	16 „
		—
		70
		—

A very interesting fact emerges from these figures, namely that 70 or 38.7 per cent. of the cases occurred in the above four districts, comprising the north-eastern and most rural area in the county. This is all the more interesting as one expects an infectious disease such as poliomyelitis to occur with greater frequency in the more populous districts.

The three epidemics which occurred in Leicestershire during 1926, 1935 and 1938 had a very similar distribution, most of the cases occurring in the Melton Mowbray area in each instance. The numbers of deaths from poliomyelitis in 1926 and 1935 were 9 and 10 respectively, no deaths being recorded in 1938.

Dr. Mackintosh investigated the 1926 epidemic and recorded his findings in the annual report for that year ; while the second epidemic was investigated by Dr. Cowan and recorded in the annual report for 1935.

It was shown in the report on the former epidemic that children between the ages of 5 and 8 had a greater susceptibility than adults or children in the other age groups. This period of minimum resistance also occurred in the 1935 epidemic but is hardly perceptible in the epidemic of last year—*vide* Table 2. There would not appear to be in the three series of cases any great preponderance in the number of either sex affected.

TABLE 2.

Age	1926		1935		1938		Total
	male	female	male	female	male	female	
Under 1 year	—	2	—	—	—	1	3
1 - 2	2	2	—	—	—	2	6
2 - 3	6	2	1	2	1	1	13
3 - 4	5	2	1	—	—	1	9
4 - 5	3	2	1	2	1	—	9
5 - 6	5	5	2	2	1	—	15
6 - 7	4	5	1	2	3	—	15
7 - 8	2	1	—	2	—	—	5
8 - 9	1	2	1	1	—	—	5
9 - 10	—	2	1	2	1	—	6
10 - 15	7	2	7	5	1	1	23
15 - 20	1	3	1	—	—	3	8
20 - 25	2	2	1	1	—	—	6
Over 25	1	1	1	—	3	—	6
	39	33	18	19	11	9	129

With regard to the possible relationship between acute anterior poliomyelitis and diphtheria referred to earlier in this article, it might be mentioned that a number of the cases occurring last year who had never suffered from diphtheria were Schick tested, but as the tests proved positive and negative in about equal proportions little value can be attached to the results.

In 1938 a total of 20 cases of acute anterior poliomyelitis were notified, though as a result of a close investigation into each it is thought that a small proportion may not have been true cases. As an abortive type of the disease is known to occur however, none of the cases notified could be ruled out with any degree of certainty.

The seasonable distribution of the cases was as follows :—

January	....	....	....	....	1 case
August	....	....	....	....	1 „
September	....	....	....	....	3 cases
October	....	....	....	....	10 „
November	....	....	....	....	4 „
December	....	....	....	....	1 case

With a few exceptions the cases were mild, and no deaths occurred. The onset was abrupt in 17 cases and the chief early symptoms in order of frequency are summarised below :—

Rise of temperature	....	....	....	Occurred in 14 cases
Headache	....	....	....	„ „ 13 „
Pain	....	....	....	„ „ 13 „
Flushed face	....	....	....	„ „ 10 „
Sweating	....	....	....	„ „ 10
Restlessness	....	....	....	„ „ 10 „
Drowsiness	....	....	....	„ „ 10 „
Vomiting	....	....	....	„ „ 8 „
Hyperæsthesia	....	....	....	„ „ 8 „
Nausea	....	....	....	„ „ 7 „
Sore throat	....	....	....	„ „ 6 „
Coryza	....	....	....	„ „ 6 „
Muscle tenderness	....	....	....	„ „ 6 „
Cough	....	....	....	„ „ 5 „
Irritability	....	....	....	„ „ 5 „
Rigors	....	....	....	„ „ 4 „
Fear or apprehension	....	....	....	„ „ 4 „
Stupor	....	....	....	„ „ 4 „
Head retraction	....	....	....	„ „ 4 „
Diarrhœa	....	....	....	„ „ 3 „
Tremors	....	....	....	„ „ 3 „
Muscle twitching	....	....	....	„ „ 3 „
Muscle rigidity	....	....	....	„ „ 3 „
Retention of urine	....	....	....	„ „ 3 „
Rash	....	....	....	„ „ 1 case



In only one case did the condition of the patient give rise to anxiety, the disease in the others running a normal course. In this one instance it was the prompt action of the staff attached to the isolation hospital where the patient was receiving treatment in obtaining an "iron lung" that saved his life. Details of this case are as follows :—

*H.T.C. Male, age 27.*—The first symptoms of the disease were noticed on October 17th, 1938, the patient developing a "cold in his head" which was accompanied by slight headache and a feeling of nausea. After a few days the nausea passed off but the coryza and headache persisted and on October 27th the patient felt very much worse, the headache being "almost splitting" in character and accompanied by a pain in the lumbar region. A sudden complete paresis of the right arm quickly followed, the temperature rose to about 100°F. and during the same evening the patient vomited and was shortly afterwards admitted to an isolation hospital. By October 29th both arms were paralysed and the headache and pain in the lumbar region were very severe. Between this date and November 5th some improvement was noticed in the patient's general condition, though there was no change in the paralysis. On November 6th the headache again became worse but otherwise his condition was stationary until 1-45 p.m. when the breathing suddenly almost ceased, colour became cyanosed and there were marked signs of collapse. The patient quickly became unconscious; stimulants were given and, as soon as it was clear that his condition was serious, steps were taken to obtain a respirator from a town about forty miles distant where it had been unsuccessfully employed in a similar case.

At 5 p.m. on the same day, November 6th, the patient was placed in this respirator and the response was immediate, his colour improving and consciousness returning although at this stage the diaphragmatic and intercostal muscles were found to be paralysed. On November 11th he was much better and feeling comfortable in the respirator, and his subsequent progress to recovery was gradual and uneventful. The usual precautions were taken in removing him from the respirator, at first for short intervals and then for increasingly longer periods, until it was possible to discharge him from hospital on December 22nd, 1938.

Of the 20 cases notified 12 were severe enough to warrant special treatment, and 7 of these are still receiving attention. The rest are in a satisfactory condition and at the moment do not require any treatment.

ARTHUR A. LISNEY.

*Deputy County Medical Officer.*

## (2) THE DOCTOR AT THE INFANT WELFARE CENTRE.

This article was inspired by a paragraph in a booklet entitled "A General Medical Service for the Nation," which was issued by the British Medical Association in 1938. Under the heading "Personal Health Services," the Association expressed itself as follows :—

"Advice on infant and child welfare should be provided wherever possible by the patient's own doctor, in view of the recognised advantages to the child of continuity of medical advice and treatment. Such continuity is important for the infant as for the adult. While in this, as in other spheres of his activity, the general responsibility for the advice and guidance must rest with the family doctor, and while this would render unnecessary any other provision for general medical care, the practitioner may yet think that some part of this work should be undertaken at child welfare centres. Thus, the system of child welfare centres at which mothers can obtain advice and guidance in the care and nurture of their children would continue to be of the greatest value. . . . The centres should continue their educational and social work in collaboration with the family doctor."

It has been urged very frequently of recent years that preventive medicine should be a function of the general practitioner. The suggestion underlying the rather curiously-worded paragraph just quoted is that as much as possible of the work now being undertaken at the infant welfare centre should be placed in the hands of the family doctor. The compliment about the value of the welfare centre system comes too late, and smacks too much of the afterthought, to allay our suspicions. "The practitioner may yet think"—a very odd and significant phrase—that some part of the work may safely be left to the clinic; but the practitioner must call the tune.

The explanation given for this is "the recognised advantage of continuity of medical advice and treatment." But herein lies a fallacy. The advantage of continuity can only be admitted without question when it is certain that we are not dealing with a mixture of different kinds of advice and treatment, calling for special qualities in him who administers them. Nobody deplores the want of continuity of treatment when a patient has his teeth removed by one pair of hands, his tonsils by another, and his appendix by a third; that when he becomes insane or contracts tuberculosis, or syphilis, or scarlet fever, he passes from his general practitioner to the care of a specialist. Now all of these conditions—disorders of the mind, fevers, venereal diseases, and the rest, are subjects which the practitioner studied in his undergraduate days; but what of Infant Welfare?

Is not this also a specialty?—and one of which the average medical man has never made any co-ordinated study; upon which he has never taken an examination, perhaps never opened a textbook or listened to a single lecture. Until quite recently the nearest approach to the teaching of infant welfare at any university was the course on Diseases of Children. When a Chair of Child Life and Health was established in Edinburgh in 1932 it was something without precedent in Britain. It is hardly an exaggeration to say that most medical graduates are turned loose on the public, knowing less about infant welfare than the average young mother of one child. She has read the articles by "Our Health Nurse" in the weekly magazines, he has probably read nothing. She has been advised by the health visitor and listened to talks at the infant welfare centre; best of all, she has had the experience of spending twenty-four hours per day with a normal baby. The unfortunate young doctor has had none of these advantages. During his first two years in practice his patients teach him more about infant care than he teaches them. Later on he marries and has children of his own, and his knowledge is completed by experience and the system of trial and error. In the end he has probably as good a title to give advice as the notorious old lady who has "had ten children and buried six".

My criticism of the suggestion that the family doctor is the proper source of advice upon infant welfare does not rest solely, however, on the question of specialised knowledge. A friend of mine once pointed out that the "born nurse" does not make the best health visitor, because the preventive aspect does not sufficiently appeal to her. For precisely the same reason, few medical men in active practice could be expected to become as efficient in preventive medicine as they now are on the curative side. The two call for different attitudes of mind; and the best type of general practitioner is, of necessity, a man of quite different stamp from the best type in the public health service. Any one who is interested in disease, who has a flair for diagnosis and takes pride in his treatment, is bound to find the examination and care of healthy children rather a bore. My own view is that as long as that lively interest in pathological processes which we acquire as students, persists, no doctor can be an efficient infant welfare worker. To be successful in this, one must find real pleasure in the examination of normal babies, take a delight in discussing their ways and their health with the mother, and feel annoyed if some manifestation of disease becomes apparent. One must be actively interested in health and—almost—bored by disease.

The infant welfare clinic should be a health centre—not a minor ailments clinic. If a child is obviously ill it should be taken straight to

the family doctor, not to the clinic. The function of the Welfare Doctor is to examine normal children regularly, to advise on health and infant care both individually and in general talks, and to detect illness in its early stages. Anything which calls for medical treatment should be referred to the private practitioner. These are the lines upon which the centres are being run at present. How much of this work could be more usefully transferred to the general practitioner? More important, perhaps, how much does he really want?

Welfare centres have been accused of "taking money out of the practitioner's pocket," and a small section of the profession still regards them with suspicion. If this suspicion is ever justified, it is because the centre in question is not doing its work as it should. There are some in public health, as well as outside it, who do not understand the true function of preventive medicine. I firmly believe that the promotion of health and the treatment of disease can never be mixed without detriment to one or other, and usually both.

In order to ascertain whether, in fact, the work at my own clinics follows the ideal set out above, I made an analysis of the last thousand consultations at eight clinics. These clinics are neither very good nor very bad. Most of them are overcrowded, and as the mothers are usually anxious to leave early, it is seldom possible to obtain a satisfactory number of re-examinations. Meetings are held fortnightly, the doctor visiting once each month, and on each occasion a five-minute talk is given. To hold the attention of a room crowded with mothers and their babies for even five minutes is an achievement.

#### ANALYSIS OF ONE THOUSAND INFANT WELFARE CENTRE CONSULTATIONS.

##### (a) Attitude of Mother—

No complaints	....	....	....	40%
Slightly worried about child	....			51%
Definite anxiety about child's health				9%

##### (b) Findings on examination—

Defects found	....	....	....	75% of consultations
No defects found	....	....	....	25%    „    „
Child "very healthy"	....	....		20% of consultations
Mother worrying unnecessarily	....			9%    „    „



## (c) Treatment advised for children with defects (749)—

Advice <i>re</i> general management only	54%	of defects
Home remedies advised ....	23%	„
Sent to own doctor ....	13%	„
“Treated” at clinic ....	8%	„
Referred to Oculist ....	1%	„
Referred to Dentist ....	0.5%	„
No treatment ....	1.5%	„

One child was recommended for removal of tonsils and adenoids, and two were referred to the orthopædic clinic.

The word “defect” is used to cover any departure from normal, even the most trivial. The majority, being slight, were easily rectified by alterations in routine, no specific medical advice being necessary. It is surprising how much can be achieved by attention to the elementary details of feeding and general management.

Home remedies include all those little items of household medical lore which the ordinary educated parent should have at his command. The commonest conditions to which these applied were mild bronchitis (17%), seborrhœa and seborrhœic eczema (11%) and constipation (11%). Home remedies include the following, variously employed :—

Olive oil.  
 Camphorated oil.  
 Glycerine.  
 Liquid paraffin.  
 Castor oil.  
 Various laxatives in common use.  
 Skin creams (*e.g.* “Nivea,” “Hazeline,” etc.).  
 Calamine lotion.  
 Zinc ointment.  
 Golden eye ointment.  
 Boric lotion.  
 Hydrogen peroxide.  
 Cod liver oil and Halibut liver oil.  
 Various malt preparations, with or without iron (*e.g.* “Maltoline,” and “Maltoline with Iron”).

These are all remedies which are regularly purchased by the general public without a doctor’s prescription, and if their intelligent application is an adequate treatment for a defect, there is no reason why their use



should not be encouraged. The prescribing of "patent medicines" at clinics is, of course, indefensible.

The only conditions treated at the clinic are umbilical hernia (by strapping and the prohibition of binders) and mild cases of phimosis and adherent prepuce. Of the latter, twenty-four were treated at the clinic, thirty were severe enough to be referred to the practitioner.

Ninety-five children with defects, being 13% of the total found, were sent to the family doctor. The commonest conditions referred were:

Phimosis and adherent prepuce	....	31%
Conjunctivitis	....	7%
Bronchitis	....	6%
Tonsilitis, acute and chronic	....	6%
Seborrhœic eczema	....	6%
Nævus	....	6%
Impetigo	....	5%

Other conditions were :—diarrhoea and vomiting (3 cases), septic spots, adenitis, malnutrition, cystitis, anæmia, urticaria, erythema, and Mongolism.

Returning to the analysis, it will be noted that in only 9% of consultations was there any definite anxiety on the mother's part. This includes all cases where it was considered that the mother might have consulted her own doctor if there had been no clinic. On the other hand, 13% of cases were actually referred from the clinic to the family doctor. It would appear, therefore, that far from the clinics "taking money from the practitioner," the balance actually turns in the practitioner's favour.

It is worth noting, however, that only one child in four displayed no defects, and only one in five could be described as "very healthy." I hasten to add that, as previously explained, even the most trivial departure from the normal has been classed as a defect. Forty per cent. of the mothers made no complaint, and a much higher percentage would have been perfectly satisfied with the child, had it not been weighed. Many mothers only decide to consult the doctor when the fortnightly gain in weight has been disappointing.

These figures, to my mind, do justice to the claim of the clinics that they are, as they were intended to be, health centres.

Will the general practitioner ever play the primary role in infant welfare? The British Medical Association, which represents the private

practitioner, apparently thinks he should. This, I suspect, is to a certain extent a symptom of a subtle antagonism which has always existed between private practice and the public health services. This antagonism is partly due to a lack of mutual understanding—many men in public health have never had any experience in general practice, few private practitioners thoroughly appreciate the aims of public health. Again, as I maintain, there is a certain natural incompatibility between preventive and curative medicine. But there is a third factor.

Many years ago, in his preface to "The Doctor's Dilemma," Mr. George Bernard Shaw produced what is probably the most brilliant case for a general medical service for the nation which has ever been written ; the British Medical Association could do worse than crib a little of it as an introduction to their scheme. The crux of his argument was that it is wrong to give any section of the community a pecuniary interest in disease, and sheer political insanity to keep the medical profession in such a position. "Nothing is more dangerous than a poor doctor : not even a poor employer or a poor landlord. Of all the anti-social vested interests the worst is the vested interest in ill-health." When, as a medical student, I first read this attack, I was filled with indignation ; but my attitude is quite different to-day. Whenever a reform is opposed by the body of the profession, the basis of the opposition is financial. The objections raised by private practitioners to schemes for free immunisation of the public against diphtheria provides a topical example. This fear of encroachment on private practice by the public health services springs from the natural distrust of the free-lance for the man with the regular salary ; a fear which a general medical service alone can dispel.

In so far as the infant welfare centres are functioning as they should, they are doing only preventive work. I do not believe that it would be an advantage to place this work, or the general responsibility for it, on the shoulders of the private practitioner. But the point I want to make is this: that when general practice has been delivered from the bondage of money, when a national medical service has done away with the need for a jealous guarding of his preserves, I shall be very surprised if the practitioner himself is not the first to ask that he be relieved of the duties in question ; for not merely his interest, but his true vocation, lies elsewhere.

A. W. STOPFORD THOMPSON,  
*Assistant County Medical Officer.*



Diagnosis	PULMONARY.				NON-PULMONARY.				TOTAL.			
	Adults		Children		Adults		Children		Adults.		Children	
	M	F	M	F	M	F	M	F	M	F	M	F
A.—New Cases examined during the year (excluding contacts) :—												
(a) Definitely tuberculous ....	99	64	3	4	9	15	10	10	108	79	13	14
†(b) Diagnosis not completed ....	...	...	...	...	...	...	...	...	22	8	12	4
(c) Non-tuberculous ....	...	...	...	...	...	...	...	...	137	166	70	45
B.—Contacts examined during the year :—												
(a) Definitely tuberculous ....	9	3	1	3	—	2	—	1	9	5	1	4
†(b) Diagnosis not completed ....	...	...	...	...	...	...	...	...	1	1	5	2
(c) Non-tuberculous ....	...	...	...	...	...	...	...	...	37	57	68	52
C.—Cases written off the Dispensary Register as												
(a) Recovered ....	26	35	10	7	8	8	14	9	34	43	24	16
(b) Non-tuberculous ....	...	...	...	...	...	...	...	...	196	240	144	109
D.—Number of Persons on Dispensary Register on December 31st :—												
(a) Definitely tuberculous ....	491	496	75	73	78	81	82	75	569	577	157	148
†(b) Diagnosis not completed ....	...	...	...	...	...	...	...	...	24	10	18	7

1. Number of cases on Dispensary Register on January 1st, 1938 ....	1514	2. Number of cases transferred from other areas and cases returned after discharge under Head 3 in previous years ....	44
3. Number of cases transferred to other areas, cases not desiring further assistance under the scheme, and cases "lost sight of" ....	41	4. Cases written off during the year as Dead (all causes) ....	121
5. Number of attendances at the Dispensary (including Contacts) ....	5143	6. Number of Insured Persons under Domestic Treatment on the 31st December	90
7. Number of consultations with medical practitioners :— (a) Personal .... (b) Other ....	186 840	8. Number of visits by Tuberculosis Officers to homes (including personal consultations) ....	1627
9. Number of visits by Health Visitors to homes for Dispensary purposes ....	4539 + 3517 Visits by C.N.A.	10. Number of :— (a) Specimens of sputum examined .... (b) X-ray examinations made .... in connection with Dispensary work	518 *518
11. Number of "Recovered" cases restored to Dispensary Register, and included in A(a) and A(b) above ....	4	12. Number of "T.B. plus" cases on Dispensary Register on December 31st ....	486

† Remaining undiagnosed on 31/12/38.

\* Includes 254 Screenings.





## T.B. 2.—SANATORIA, HOSPITALS, AND OTHER RESIDENTIAL INSTITUTIONS FOR THE TREATMENT OF TUBERCULOSIS.

Name and Situation of Institution.	Class of Case and No. of Beds.		Number of patients sent by the Council who were under treatment on the 31st, Dec., 1937.	Number of patients sent by the Council during the year ended December 31st, 1938.	Number of patients sent by the Council who were discharged or died in the Institution during the year ended 31st December, 1938	Total number of days during which the patients referred to in column 5 were resident in the Institution.	Average number of days which the patients referred to in column 5 were resident in the Institution.	Number of patients sent by the Council who were under treatment on the 31st December, 1938.
(1)	(2)		(3)	(4)	(5)	(6)	(7)	(8)
County Sanatorium, Markfield.	Male Adults	P	52	124	120	20216	*168	56
	(56 beds)							
	Female Adults	P	48	100	106	17882	†169	42
	(52 beds)							
	Children	P	19	41	38	5622	‡148	22
	(22 beds)							
Children's Hospital, Gringley on the Hill.	Children	S	2	1	1	698	698	2
Harlow Wood Orthopædic Hospital, Mansfield, Notts.	Male Adults	S	1	5	6	656	109	—
	Children	S	4	1	3	749	250	2
	Female Adults	S	1	—	1	426	426	—
Hospital of St. Cross, Rugby.	Male Adults	S	1	—	1	616	616	—
Leicester City General Hospital, Leicester.	Male Adults	S	4	10	12	1698	142	2
	Female Adults	S	3	8	8	1309	164	3
	Children	S	5	5	9	3676	408	1
Warwickshire Orthopædic Hospital, Coleshill.	Children	S	7	8	6	5022	837	9
	Female Adults	S	—	2	1	9	9	1
TOTALS .....			147	305	312	58579	188	140

\*14 patients stayed less than 6 weeks—average stay of remainder was 188 days.

†15 " " " " " " " " " " 193 "

‡10 " " " " " " " " " " 193 "

P—Pulmonary Tuberculosis.

S—Surgical Tuberculosis.



**T.B. 3.—Return shewing the immediate results of treatment of patients discharged from Residential Institutions during the year 1938.**

Classification on admission to Institution.			Condition at time of discharge.	Duration of Residential Treatment in the Institution.												TOTAL.
				Under 3 months but ex- ceeding 28 days			3—6 months			6—12 months			More than 12 months			
				M.	F.	Ch.	M.	F.	Ch.	M.	F.	Ch.	M.	F.	Ch.	
PULMONARY TUBERCULOSIS.	Class T.B. minus.	Quiescent ....	4	—	—	10	15	6	8	8	6	2	1	1	61	
		Not quiescent ....	1	1	—	—	—	—	1	1	—	1	—	—	5	
		Died in Institution ....	—	—	—	1	1	1	—	—	—	—	—	—	3	
	Class T.B. plus Group 1.	Quiescent ....	—	—	—	4	3	—	1	—	—	—	—	—	8	
		Not quiescent ....	—	—	—	—	—	—	—	—	—	—	—	—	—	
		Died in Institution ....	—	—	—	—	—	—	—	—	—	—	—	—	—	
	Class T.B. plus Group 2.	Quiescent ....	1	1	—	4	2	—	11	7	—	2	—	—	28	
		Not quiescent ....	7	4	—	9	5	—	11	9	—	—	3	—	48	
		Died in Institution ....	—	—	—	—	1	—	1	3	—	—	—	—	5	
	Class T.B. plus Group 3.	Quiescent ....	—	—	—	—	—	—	1	—	—	—	—	—	1	
		Not quiescent ....	3	2	—	2	5	—	6	4	—	2	1	—	25	
		Died in Institution ....	4	3	—	4	5	—	3	2	—	—	—	—	21	

205

In addition 37 cases who had been admitted for observation purposes, were discharged during the year, 9 as "definitely tuberculous" and 28 as "Non-Tuberculous."

**Non-Pulmonary Tuberculosis.**

Bones and Joints :—	Quiescent	....	....	....	....	20
	Not Quiescent	....	....	....	....	13
	Died	....	....	....	....	2
Abdominal :—	Quiescent	....	....	....	....	2
	Not Quiescent	....	....	....	....	1
	Died	....	....	....	....	—
Other Organs :—	Quiescent	....	....	....	....	5
	Not Quiescent	....	....	....	....	—
	Died	....	....	....	....	—
Peripheral Glands :—	Quiescent	....	....	....	....	6
	Not Quiescent	....	....	....	....	1
						50

*Note.*—A further 29 cases who had been in Institutions less than 28 days were also discharged during the year.



T.B. 4. TUBERCULOSIS (Pulmonary and Other).

Year	Number of Notifications.				Number of Deaths.			Death Rate.		
		Urban	Rural	Whole County	Urban	Rural	Whole County	Urban	Rural	Whole County
1933	Lungs Other	128 31	147 51	275 82	86 15	128 26	214 41	0.70 0.12	0.69 0.14	0.69 0.13
1934	Lungs Other	126 33	148 55	274 88	77 17	106 24	183 41	0.62 0.14	0.56 0.13	0.59 0.13
1935	Lungs Other	106 36	107 39	213 75	82 18	79 16	161 34	0.68 0.15	0.44 0.09	0.54 0.12
1936	Lungs Other	111 27	111 37	222 64	73 16	84 18	157 34	0.54 0.12	0.51 0.11	0.53 0.11
1937	Lungs Other	126 45	95 36	221 81	82 18	80 22	162 40	0.58 0.13	0.50 0.14	0.54 0.13
Average for above 5 years.	Lungs Other	119 34	122 44	241 78	80 17	95 21	175 38	0.62 0.13	0.54 0.12	0.58 0.12
1938	Lungs Other	105 48	85 40	190 88	59 15	56 15	115 30	0.42 0.11	0.35 0.09	0.38 0.10



**T.B. 5. TUBERCULOSIS :—Notifications and Deaths.**  
**Shewing Age Periods.**

AGE PERIODS.	NEW CASES.				DEATHS.*			
	Pulmonary		Non-Pulmonary		Pulmonary		Non-Pulmonary	
	Males	Females	Males	Females	Males	Females	Males	Females
0 to 1 ....	—	—	— <sup>1</sup>	1	—	1	1	1
1 to 5 ....	—	—	2 <sup>4</sup>	4 <sup>2</sup>	—	—	4	5
5 to 15 ....	7 <sup>3</sup>	8 <sup>4</sup>	11 <sup>2</sup>	15 <sup>2</sup>	1	1	2	3
15 to 25 ....	31 <sup>9</sup>	30 <sup>11</sup>	13	13 <sup>1</sup>	5	18	6	1
25 to 45 ....	39 <sup>14</sup>	30 <sup>16</sup>	8 <sup>2</sup>	12 <sup>3</sup>	28	24	5	1
45 to 65 ....	30 <sup>6</sup>	10 <sup>5</sup>	4	5 <sup>1</sup>	21	6	1	—
65 and upwards....	2	3 <sup>3</sup>	—	—	5	5	—	—
Total ....	109 <sup>32</sup>	81 <sup>39</sup>	38 <sup>9</sup>	50 <sup>9</sup>	60	55	19	11

NOTE.—The figures in small type show additional cases which came to the notice of the County M.O.H. other than by formal notification.

\* 26 of the deaths were of non-notified cases.

## DEATHS FROM TUBERCULOSIS.

## NOTIFICATIONS OF TUBERCULOSIS.

Estimated  
Population  
Mid-Year.

District.

Pulmonary

Attack  
Rate.Non-  
Pulmonary.Attack  
Rate.

Pulmonary.

Death  
Rate.Non-  
Pulmonary.Death  
Rate.

Ashby-de-la-Zouch  
 Ashby Woulds     ....  
 Coalville     ....  
 Hinckley     ....  
 Loughborough     ....  
 Market Harborough  
 Melton Mowbray     ....  
 Oadby     ....  
 Shepshed     ....  
 Wigston Magna     ....

URBAN.

TOTALS

105

.74

48

.34

59

.42

15

.11

Ashby-de-la-Zouch  
 Barrow-on-Soar     ....  
 Billesdon     ....  
 Blaby     ....  
 Castle Donington     ....  
 Lutterworth     ....  
 Market Bosworth     ....  
 Market Harborough  
 Melton and Belvoir

RURAL.

4

.29

9

.65

1

.07

1

.07

29

.74

7

.18

26

.67

4

.10

1

.16

—

—

3

.48

—

—

16

.48

3

.09

5

.15

2

.06

3

.37

2

.25

4

.49

1

.12

1

.10

2

.19

2

.19

1

.10

19

.78

7

.29

7

.29

5

.21

5

.58

7

.81

4

.46

—

—

7

.41

3

.18

4

.24

1

.06

TOTALS

85

.53

40

.25

56

.35

15

.09

TABLE 1.—VITAL STATISTICS.

	LEICESTERSHIRE COUNTY, 1938						ENGLAND AND WALES.		
	Urban		Rural		Whole County				
Population (Est. Mid-year, 1938) ....	142,100		160,500		302,600				
	No.	Rates	No.	Rates	No.	Rates	Rates		
Live Births ....	2242	15.8	2391	14.9	4633	15.3	15.1		
Deaths (all causes and all ages) ....	1507	10.60	1664	10.37	3171	10.48	11.6		
„ (under one year)....	109	*49	95	*40	204	*44	*53		
„ (Zymotic) ....	23	0.16	15	0.09	38	0.13	....		
Deaths from :—									
Measles ....	3	0.02	2	0.01	5	0.02	0.04		
Whooping Cough ....	2	0.01	1	0.01	3	0.01	0.03		
Diphtheria ....	13	0.09	6	0.04	19	0.06	0.07		
Scarlet Fever ....	—	—	3	0.02	3	0.01	0.01		
**Diarrhoea (under 2 yrs.)	5	*2.23	3	*1.25	8	*1.73	*5.5		
							Percentages of Total Deaths.		
The seven chief causes of death were :—							Urban	Rural	Wh C'n'
Heart Disease ....	373	2.62	411	2.56	784	2.58	24.8	24.7	24
Cancer ....	198	1.39	265	1.65	463	1.53	13.1	15.9	14
Cerebral Hæmorrhage ....	109	0.77	99	0.62	208	0.69	7.2	5.9	6
Congenital Debility ....	85	0.60	63	0.39	148	0.49	5.6	3.8	4
Pneumonia <sup>1</sup> ....	69	0.49	66	0.41	135	0.45	4.6	4.0	4
Senility ....	68	0.48	65	0.41	133	0.44	4.5	3.9	4
Phthisis ....	59	0.42	56	0.35	115	0.38	3.9	3.4	3

NOTES.— \*The rates are calculated per thousand of the population except where marked (\*) which are per thousand registered births.

\*\*The Diarrhoea rates per thousand of the population are — Urban 0.04  
Rural 0.02 ; Whole County 0.03.



TABLE 3.—NOTIFIABLE DISEASES.

DISEASE.	Total cases notified.	Cases admitted to Isolation Hospital.	Total Deaths.
<i>Notifications returned by the Registrar General :—</i>			
Small-pox ....	—	—	—
Diphtheria ....	397	402	19
Scarlet Fever ....	834	712	3
Enteric Fever ....	2	3	—
Pneumonia ....	308	2	135
Puerperal Pyrexia ....	51	30	15
Erysipelas ....	130	22	—
<i>Other Diseases generally notifiable :—</i>			
Ophthalmia Neonatorum ....	15	—	—
Tuberculosis—Lungs ....	190	—	115
„ other forms ....	88	—	30
Poliomyelitis ....	20	16	—
Cerebro-spinal Fever ....	12	10	8
TOTALS ....	2,047	1,197	325

Figures supplied by the Registrar General are for the 52 weeks ending 31st December, 1938.









TABLE 5.

CAUSES OF DEATH IN ADMINISTRATIVE AREAS.

Causes of Death.	Ashby-de-la Zouch U.D.		Ashby Woulds U.D.		Coalville U.D.		Hinckley U.D.		Lough-borough M.B.		Market Harborough U.D.		Melton Mowbray U.D.		Oadby U.D.		Shepshed U.D.		Wigston U.D.		Ashby-de-la Zouch R.D.		Barrow-upon-Soar R.D.		Billesdon R.D.		Blaby R.D.		Castle Donington R.D.		Lutterworth R.D.		Market Bosworth R.D.		Market Harborough R.D.		Melton & Belvoir R.D.		Totals. U.D.'s		Totals. R.D.'s		Totals. Whole County.	
Civilians only.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.				
ALL CAUSES.	28	26	14	16	151	97	197	177	157	159	50	49	63	72	24	25	35	30	69	68	65	67	223	220	38	28	140	129	50	48	57	65	139	106	41	49	90	109	788	719	843	821	3171	
1 Typhoid and paratyphoid fever																																												
2 Measles					1	1						1										1											1				1	2	1	1	5			
3 Scarlet fever																							1												1					3	3			
4 Whooping cough								2																												1		2			1	3		
5 Diphtheria					1	3	2	1	1										2	3			1		1	1	1	1					1				6	7	3	3	19			
6 Influenza		1	1	1	2	1		4	6	1	1				1						2	2	6	2	1		2	1			1			2	1	1		10	9	13	8	40		
7 Encephalitis lethargica													1																												1			
8 Cerebro-spinal fever		1			1		1										1					1				1	1												3	1	1	3	8	
9 Tuberculosis of respiratory system	1	1	1		2	3	7	7	11	7	1	2		1	2		3	2	6	2		1	12	14	1	2	4	1	2	2	2		3	4		4	2	2	34	25	26	30	115	
10 Other tuberculosis	2					1	5		1			1	1		1				2	1		1	1	3			1	1	1		1		2	3			1		12	3	7	8	30	
11 Syphilis					1		2	1															1		1								1	2	1				3	1	3	3	10	
12 General paralysis of the insane, tabes dorsalis											1																	1										1		1			2	
13 Cancer	4	8	1	2	18	12	22	26	16	24	4	8	10	10	2	1	6	6	8	10	10	7	34	36	4	9	20	29	11	7	12	7	12	18	3	5	18	23	91	107	124	141	463	
14 Diabetes		2			2	4	3	2	3	6			1	4	1			1	1	1			5	9			1		1					1		2	1	2	11	20	7	15	53	
15 Cerebral hæmorrhage, &c.	2	1	1	3	7	9	15	21	6	9	5	4	1	13	2	3			2	5	3	7	9	14	4	2	12	13	5	1	1	3	5	7	2	1	5	5	41	68	46	53	208	
16 Heart disease	8	6		5	37	18	44	34	48	48	20	11	19	18	7	8	5	5	15	17	24	18	62	52	6	3	17	21	14	14	14	24	35	25	10	13	30	29	203	170	212	199	784	
17 Aneurysm								1											1				1				2												2	4			6	
18 Other circulatory diseases	1		1		6	4	8	6	8	10	1	4		3	3		2	3	1	1	3	2	6	12	3	1	11	12		4	6	4	10	7	3	1	3	5	31	31	45	48	155	
19 Bronchitis	1	1	1		3	2	3	6	4	1			4			3	1		3	1	1	2	3	2	1	1	8	4	1		2	1	4	1	2	3	1	4	20	14	23	18	75	
20 Pneumonia (all forms)			1		6	4	18	4	6	5	3	1	3	5			3	1	5	4	5	2	9	4	3	3	2	1		3	1	5	9	3	3	2	5	6	45	24	37	29	135	
21 Other respiratory diseases	1				3	1	3	1	1	2			1	1			1			1	1	2	2	3				1		2			4	1				4	10	6	7	13	36	
22 Peptic ulcer			1		2	1	1	1	2	1	1		3	2			2		2	1			4			1	4	1	1				1			1	1	1		14	6	12	3	35
23 Diarrhœa, (under 2 years)					2			1									1					1										1							4	1	1	2	8	
24 Appendicitis	1				2		3	2		2								1				1									2	1							7	5	4	7	23	
25 Cirrhosis of liver					1		1	1			1		1									1					2		1			1							4	1	5	1	11	
26 Other diseases of liver, etc.						1		3	1	1			1			1					4	1	5					1		2	1	1		2				2	7	2	15	26		
27 Other digestive diseases			1		2	1	5	5	2		1		1		2																													





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